# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# **Draft Staff Report**

Proposed Amended Rule 1309.1 – Priority Reserve; and Proposed Re-Adopted Rule 1315 – Federal New Source Review Tracking System

June 2007 Set Hearing

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TRACKING SYSTEM, SEPTEMBER 8, 2006

#### **EXECUTIVE SUMMARY**

Amendments have been developed to replace the September 8, 2006 amendments to Rule 1309.1. This proposal was developed in response to Board direction at that September rule amendment hearing for staff to address localized impacts. In addition, it is proposed to re-adopt Rule 1315. Upon amendment of Rule 1309.1 and adoption of Rule 1315 on September 8, 2006, the District was sued by members of the environmental community that alleged the rulemaking did not undergo the appropriate CEQA analysis. Although staff strongly disagrees with this allegation, nevertheless, a programmatic Environmental Assessment (EA) has been prepared for this replacement and re-adoption rulemaking to resolve the CEQA matter.

The September 8, 2006 amendments to Rule 1309.1 provided access for electrical generating facilities (EGFs) to Priority Reserve credits subject to certain limitations and criteria, including the payment of a mitigation fee. Concerns were raised by Board members at that hearing that additional criteria should be developed to address localized impacts. In response to the Board direction, staff drafted several proposals and conducted an extensive outreach program consisting of several public forums and meetings with interested stakeholders. The staff proposal for Rule 1309.1 reflects the Board directive as well as the input from the public outreach. Rule 1315 is an administrative rule requested by U.S. EPA to formalize AQMD's accounting methodology for tracking changes to its internal New Source Review (NSR) offset accounts for the purpose of demonstrating programmatic equivalence between the AQMD's NSR program and federal NSR requirements.

Based on the input from the public and interested stakeholders, staff has crafted these proposed amendments to Rule 1309.1 that will provide access to the Priority Reserve for EGFs considering localized air quality and environmental justice concerns. Ambient PM 2.5 levels are used to characterize local air quality and divide the District into three zones. Zone 1 has ambient PM 2.5 levels less than 15 ug/m<sup>3</sup>. Zone 2 has ambient PM 2.5 levels between 15 and 20 ug/m<sup>3</sup> and Zone 3 has ambient PM 2.5 levels greater than 20 ug/M<sup>3</sup>. An Environmental Justice Area (EJA) has also been defined as areas where 10% or more of the population is living in poverty (based on 2000 Federal census data) and either the cancer risk is greater than one in one thousand (as determined by AQMD Multiple Air Toxics Emission Study - MATES II study), or the PM<sub>10</sub> exposure is greater than 46μg/m<sup>3</sup> as determined by AQMD monitoring. In an effort to discourage the siting of EGFs in the most polluted areas of the Basin, mitigation fees are proposed to be 50% higher for emission credits purchased from the Priority Reserve by EGFs in Zone 2 and 100% higher for emission credits purchased from the Priority Reserve by EGFs in Zone 3 or in EJA as compared to the fees charged in Zone 1. However, all of the proposed fees are within the range of prices charged in recent years for ERCs on the open market. committed that all of the monies from the purchase of credits less the administrative cost of implementing the program will be used for pollution reduction projects in and around communities where EGFs are located, with at least one third of the monies used for alternative and renewable energy projects.

In addition, for projects located in Zones 2 and 3 there are more stringent requirements for cancer risk and chronic and acute hazard indices. The proposed rule establishes hourly emissions limits and also the annual rate of emissions. Limits have also been established for the annual hours of operation for simple cycle turbines based on the zone they are located and for maximum ground level impacts based on air quality modeling.

This proposal has been modified since the version presented at the public workshop held on April 19, 2007. The 635 MW cap for access to the Priority Reserve in Zone 3 or the EJA has been replaced with additional stringent emissions-based criteria that all projects in Zone 2 and Zone 3 or the EJA must meet to purchase credits from the Priority Reserve. In addition, more stringent criteria are proposed for projects greater than 500 MW in Zone 3 or the EJA.

The programmatic EA prepared for this rulemaking includes elements to more fully examine the breadth of proposals that have been discussed for Rule 1309.1 including regional energy projects and bio-solids from wastewater treatment facilities. A subsequent rule amendment to Rule 1309.1 – Priority Reserve is contemplated for rulemaking after adoption of the replacement Rule 1309.1 and re-adoption of Rule 1315. This subsequent rule amendment will address the issues of bio-solids and Energy Projects of Regional Significance (EPRS).

#### **BACKGROUND**

At the September 8, 2006 Public Hearing, Rule 1309.1 – Priority Reserve was amended to allow EGFs temporary access to the Priority Reserve to obtain  $SO_x$ , CO and PM10 credits. These September amendments once again provided new EGFs access to the Priority Reserve where these proposed projects either do not have or can not secure the needed offsets on the open market. California has been experiencing a shortage of electricity for over a year with some Stage 3 shortages (power reserves of less than 1.5%) and rolling brownouts and curtailments occurring recently, and the demand for offsets in the open market exceeded the available supply. Access by EGFs was subject to certain criteria, including paying a non-refundable mitigation fee.

PM2.5 emissions are considered the emissions with greatest localized and regional health impacts from new power plants. Fine particles in the PM2.5 fraction have the ability, because of their size, to penetrate and deposit deep in the lungs. Elevated concentrations of PM2.5 are associated with adverse health impacts. Increased mortality, reduction in lung function, and increased hospitalizations are among some of the adverse health impacts associated with exposure to elevated concentrations of PM2.5. Most of the

AQMD is currently in non-attainment with regards to the annual and 24-hour federal ambient air quality standards of 15  $\mu$ g/m³ and 35  $\mu$ g/m³, respectively. The AQMD has until 2015 to demonstrate attainment with the annual PM2.5 standard. The AQMD is also in non-attainment with the more stringent state ambient air quality PM2.5 standard. EGFs are large point sources of PM2.5 emissions and the additional limitations and requirements contained in the revised proposal are consistent with the AQMD efforts to achieve air quality goals.

Subsequent to the September 2006 Board adoption, staff conducted several meetings with interested stakeholders, including two public workshops, one public consultation and two public meetings in the affected communities. Based on the Board's direction and the input from the energy industry, impacted community, environmental activists, and regulatory and municipal agencies, staff has crafted the proposed amendments for the consideration of the Board for adoption in July 2007. These proposed amendments fully replace the September 8, 2006 amendments to Rule 1309.1.

Rule 1315 was developed at the request of and with the approval of the U.S. EPA to formalize the AQMD's accounting methodology in tracking debits and credits to its offset accounts as required by U.S. EPA to establish that sufficient offsets are provided for all major sources pursuant to the federal Clean Air Act. After months of discussions and over 6000 person-hours, all issues and questions of U.S. EPA regarding AQMD's NSR offset tracking were addressed. Rule 1315 was adopted on September 8, 2006 and forwarded to the California Air Resources Board (CARB) and ultimately U.S. EPA for inclusion in the State Implementation Plan (SIP). Because the adoption of Rule 1315 was challenged on CEQA grounds, Rule 1315 is currently proposed for re-adoption. An Environmental Assessment for both Rule 1309.1 and Rule 1315 has been released for public comment.

#### PROPOSED AMENDMENTS TO RULE 1309.1 – PRIORITY RESERVE

The proposed amendments to Rule 1309.1 replace the amendments adopted by the AQMD Governing Board on September 8, 2006 and in addition, establish air quality, health and economic criteria for the purchase of ERCs from the Priority Reserve based on the project location of the EGF.

Staff crafted the proposed amendments that incorporate community, regulatory, and industry concerns. Existing ambient levels of PM2.5 are used to characterize the basin. Less polluted areas (Zone 1) have average annual PM2.5 concentrations of less than  $18\mu g/m^3$ . Moderate areas (Zone 2) have average annual PM2.5 concentrations of between  $18\mu g/m^3$  and  $20\mu g/m^3$ . More impacted areas (Zone 3) have annual average concentrations of more than  $20\mu g/m^3$ . Zones are determined based on the procedures described in the District's Guidance Document for Rule 1309.1 PM<sub>2.5</sub> Concentration Zone

Determination (Attachment 1). Zone 1 represents approximately eighty percent of the surface area of the South Coast Air Basin in the AQMD, Zone 2 approximately fifteen percent and Zone 3 approximately five percent. A map showing the zoning distribution is shown in Figure 1.

In addition, the proposal utilizes environmental justice criteria developed by AQMD, pursuant to California Health & Safety Code 43023.5 to determine those areas already disproportionately impacted by pollution, as requested by the communities impacted by the proposed EGFs. Environmental Justice Area (EJA) is defined as areas where 10% or more of the population is living in poverty (based on 2000 Federal census data) and either the cancer risk is greater than one in one thousand (as determined by AQMD MATES II study), or the PM10 exposure is greater than 46µg/m³ as determined by AQMD monitoring. EJA is shown in Figure 2.

To ensure that those areas already impacted by economic and environmental criteria are not subjected to disproportionate impacts from new EGFs, staff is proposing more stringent emission rates and total emissions limits for EGFs in these areas. These limits provide for a distributed approach to generation and a smaller footprint of impacts from these facilities.

This proposal has been modified since the version presented at the public workshop held on April 19, 2007. The 635 MW cap for access to the Priority Reserve in Zone 3 or the EJA has been replaced with more stringent emissions and risk-based criteria compared to currently applicable standards. All projects in Zone 2 and Zone 3 or the EJA must meet additional criteria to purchase credits from the Priority Reserve. In addition, more stringent criteria are proposed for projects greater than 500 MW in Zone 3 or the EJA.

It should be noted as well that where Priority Reserve access is authorized in Zone 2 or Zone 3 or EJA, additional criteria include requirements for cancer risk, chronic and acute hazard index and cancer burden that are more stringent than those required in other District rules. The cancer risk is one in a million or less, the chronic and acute hazard indices are 0.5 and the cancer burden is 0.1 compared to ten in a million if TBACT used, 1.0 hazard indices and 0.5 cancer burden in Rule 1401. Although EGF projects are not expected to be significant sources of toxic emissions these additional requirements were added to address concerns expressed by the environmental community for more health protective standards for EGF projects seeking Priority Reserve credits if they chose to locate in the more polluted areas. For any given project, District staff will determine the exact Zone in which that project is located by use of UTM coordinates.

More stringent emission rates threshold and total emissions of PM10 and NOx are being proposed for EGFs located in Zone 2, or Zone 3, or in EJA. For EGFs located in Zone 2, regardless of generating capacity, or EGFs located in Zone 3 or in EJA with a maximum generating capacity of 500 MW or less and seeking Priority Reserve credits, the applicant would have to substantiate with modeling that the 24-hour impact of the total combined PM10 emissions from the new or modified electrical generating units shall not exceed

 $5\mu g/m^3$ . For these EGFs, the applicant would also have to substantiate with modeling that the annual impact of the total combined PM10 emissions from the new or modified electrical generating units would be limited to  $0.75\mu g/m^3$ . Operation of simple cycle electrical generating units shall be limited to a maximum of 4000 hours per year. The PM10 and NOx emissions rate would be limited to 0.06 lb/MW-hr and 0.08 lb/MW-hr, respectively.

For EGFs located in Zone 3 or in EJA with a maximum generating capacity of more than 500 MW and seeking Priority Reserve credits, the applicant will be required to verify by modeling that the 24-hour impact of the total combined PM10 emissions from the new or modified electrical generating units shall not exceed 2.5  $\mu$ g/m³; and that the annual impact of the total combined PM10 emissions from the new or modified electrical generating units would be limited to 0.5  $\mu$ g/m³. Operation of simple cycle units in Zone 3 or the EJA with over 500 MW generating capacity will be restricted to a maximum of 3000 hours per year. The PM10 and NOx emissions rate would be limited to 0.03 lb/MW-hr and 0.05 lb/MW-hr, respectively.

The efficiency standards for the 500 MW or less projects represents, according to the most current information available to the District staff, the lowest emission rate warranteed by a turbine manufacturer for simple cycle machines and the factor for the greater than 500 MW projects is the lowest emission rate warranteed by a manufacturer for combined cycle machines and represents the current state of the art for low emission turbine technology. These levels are less than the current NSR BACT requirements.

For PM emissions, 0.06 lbs/MW-hr standard proposed for EGFs located in Zone 2 or for projects with a maximum capacity of 500 MW in Zone 3 or EJA corresponds to the lowest calculated emission rate for recently proposed or constructed simple cycle units. The 0.03 lbs/MW-hr limit for EGFs located in Zone 3 or EJA corresponds to the lowest calculated emission rate for recently proposed or constructed combined cycle units. The calculated rates are generally based on manufacturer's guarantees. The 30 lbs/hr limit is equivalent to the best controlled 500 MW simple cycle project. The proposed annual impacts of 0.5 and 0.75 ug/m³ are included because they are below the Rule 1303 significance level of 1.0 ug/m³, but are achievable.

For NOx emissions, 0.08 lbs/MW-hr limit for EGFs located in Zone 2 or for projects with a maximum capacity of 500 MW in Zone 3 or EJA corresponds to the lowest emission rate based on a permit condition for recently proposed or constructed simple cycle units. The 0.05 lbs/MW-hr limit for EGFs located in Zone 3 or EJA corresponds to the lowest emission rate based on a permit condition for recently proposed or constructed combined cycle units.

The annual hours of operation limit for simple cycle units has been established to promote the use of more efficient combined cycle projects.

Table 1 highlights the requirements to access the Priority Reserve in Zones 2 and 3.

TABLE 1
CRITERIA FOR EGFs LOCATING IN ZONE 2, ZONE 3, OR EJA

Criteria	Zone 2 or Projects	Zone 3 or EJA or
	<b>≤500 MW in Zone</b>	Projects > 500 MW
	3 or EJA	
Cancer Risk	1 in 1 million	0.5 in 1 million
Non-Cancer Risk HI	0.5	0.1
Cancer Burden	0.1	0.05
Rate of PM10 Emissions	$\leq 0.06$ lb/MW-hr	$\leq 0.03$ lb/MW-hr
Rate of NOx Emissions	$\leq 0.08$ lb/MW-hr	$\leq 0.05$ lb/MW-hr
Total Combined PM10 Hourly Emissions		≤30 lb/hr
24-hour Impact of PM10 Emissions From	$\leq 5 \mu \text{g/m}^3$	$\leq 2.5 \mu \text{g/m}^3$
New or Modified Electrical Generating		
Units		
Annual Impact of PM10 Emissions From	$\leq 0.75 \mu \text{g/m}^3$	$\leq 0.5 \mu \text{g/m}^3$
New or Modified Electrical Generating		
Units		
Yearly Maximum Hours of Operation (for	4000 or less	3000 or less
Simple Cycle Units)		

The modeling impact standards currently being proposed are more stringent than the District's current standards in Regulation XIII. This is to provide a higher margin of health protectiveness in the areas downwind from these projects. The operating hour limitations for the simple cycle units are to allow the use of simple cycle for peaking where they are most efficient but ensure they would not be used as base load units where they are less efficient than combined cycle units.

Rule 1309.1 provides access to the Priority Reserve for certain critical EGF projects that meet specific requirements and that cannot secure the needed offsets on the open market. Currently the rule specifies that funding of the Priority Reserve shall be quarterly "or other schedule deemed practicable by the Executive Officer (EO) or designee". Emphasis is provided by new language that this includes suspension by the EO of transfers from the District's NSR account if the credits are not available, and transfers will resume when the EO determines sufficient credits are available for transfer from the District's NSR account.

An EGF is defined as a facility that generates electricity for its own use and is less than 10 MW, or is a facility less than 50 MW that generates not less than 30% of its electricity to pump water to maintain the integrity of the surface elevation of a municipality or significant portion thereof; or is a thermal power plant less than 50 MW that generates electricity during peak demand periods and operates less than 300 hours per year, or is a

thermal power plant facility that generates 50 MW or greater of electricity for distribution in the state or municipality owned grid system (net generator); such facility having submitted a complete application for certification to the State Energy Resources Conservation and Development Commission (California Energy Commission or CEC) or District permit to construct application during calendar years 2000 through 2003, or 2005 through 2008 and which applications are directly related to the production of electricity. For projects submitting applications in 2005 through 2008, the power plant site and related facility must be going to be the subject of an environmental impact report, negative declaration, or other document prepared pursuant to a certified regulatory program; and in accordance with Public Resources Code Section 21080 (b)(6).

As a clarification, the rule states that for the purpose of qualifying as an EGF, the applicable version of this rule is the version in effect at the time the application is deemed complete. As the September 8, 2006 version of the rule is under litigation, the proposed rule language makes it clear that in case the September 2006 version is invalidated by a court of law, then the current proposed rule would be applicable. For the purpose of determining accessibility of the EGF to the Priority Reserve credits and determining the applicable mitigation fees, the applicable version of this rule is the version in effect at the time the final Permit to Construct is being issued. As stated earlier, in case the September 2006 version is invalidated by a court of law, then the current proposed rule would be applicable.

An In-District EGF is defined as a EGF located within the jurisdiction of the AQMD and may be qualified to draw only SOx, PM10 and CO credits provided it complies with all applicable requirements of the rule, including the specific provisions applicable to the geographic zone and the EJA that the EGF is located in.

The proposed rule defines a Downwind Air Basin EGF as an EGF located in a downwind air basin outside the District. A Downwind Air Basin EGF may be qualified to draw VOC credits provided certain conditions are met. EGFs located in a downwind air basin outside the District will need to comply with California Health and Safety Code 40709.6 and pay a mitigation fee as specified in Proposed Amended Rule 1309.1(g). The VOC credits obtained shall be at an offset ratio and inter-pollutant trading rates, if applicable, determined by the downwind district. The cumulative amount of VOC credits issued to all downwind air basin EGFs shall not exceed 5000 pounds per day. To draw the VOC credits, the downwind air basin EGF must submit a written request that must be received by the AQMD Executive Officer before January 1, 2009, and the CEC application must be submitted between calendar years 2005 through 2008.

All EGFs seeking offset credits from the Priority Reserve shall be required to comply with applicable conditions of the proposed rule, including to meet BARCT for pollutants for which credits are to be received from the Priority Reserve, pay a mitigation fee, conduct a due diligence effort to secure available ERCs in the open market, have the new source fully and legally operational at the rated capacity within 3 years following issuance

of the Permit to Construct or CEC certification, and enter into a contract, if needed, with the State of California to sell at least 50% of the portion of the power generated for which Priority Reserve credits are obtained.

The proposed rule includes a mitigation fee schedule based on the zone or area where the power plant is proposed to be located. Emission credits purchased from the Priority Reserve by EGFs in Zone 2 cost 50% more than credits for facilities in Zone 1 and emission credits purchased from the Priority Reserve by EGFs in Zone 3 or in the EJA cost 100% more. However, all three zones pay a fee that is within the range of recent market prices. Staff has committed that all of the monies from the purchase of credits will be used for pollution reduction projects in and around communities where EGFs are located, with at least one third of the monies used for alternative and renewable energy projects. For the purpose of this rule, renewable energy is defined as energy from hydropower, wind and wave power, solar and geothermal energy, and use of fossil fuels, provided the emissions are no more than those from a fuel cell.

For new EGF projects (those that filed applications in years 2005 through 2008), a refund of fees paid less AQMD administrative costs is authorized if the project is cancelled for reasons beyond the reasonable control of the applicant and the cancellation is within twelve months of credit purchase. Projects that filed applications in 2001, 2002, or 2003 may receive partial refund of fees provided a permit to construct was issued and credits were purchased based on original estimated emissions rates and a subsequent revised Permit to Construct was issued to reflect lower emission rates verified by source testing and which results were approved by the District. The applicant must submit a written request for a refund within 3 months after the source testing to qualify for the refund.

Table 2 below describes the location of the projects and the estimated mitigation fee from offset credits. It is to be noted that in addition to the mitigation fees, each project that seeks access to the Priority Reserve in Zone 2, Zone 3, or the EJA is also subject to the more stringent requirements for cancer risk, chronic and acute hazard index and cancer burden. The table also includes four other projects – CPV Ocotillo, City of Riverside, El Segundo Repower, and Reliant Energy – that had not been identified as of the September Board hearing.

Table 2
Project Location and Mitigation Fees

Project	Zone	Capacity (MW)	Mitigation Fees (Millions)
AES Highgrove <sup>2</sup>	3	300	\$47.9
BP Carson/Edison – Carson Hydrogen Power Project	1	500	\$34.9
CPV Ocotillo	1	850	\$38.5
El Segundo Repower <sup>2</sup>	1	630	\$17.8
Reliant Energy	3	656	\$67.7
Riverside Energy Resource – City of Riverside	3	96	\$16.3
Sun Valley <sup>2</sup>	1	500	\$38.9
Vernon Power Plant – City of Vernon <sup>2</sup>	2/EJA <sup>1</sup>	943	\$106.4
Walnut Creek <sup>2</sup>	2	500	\$58.4
Total		4975	\$426.9

#### Footnote:

- 1- Priority Reserve mitigation fee for EJA is based on PM2.5 Zone 3 offset credit rate (double the Zone 1 mitigation fee rate).
- 2- Permit Application submitted to SCAQMD.

Finally, staff's proposal requires EGF applicants to investigate and document the lack of availability of alternative/renewable energy to their proposals. The intent of this provision is to require use of alternative/renewable energy where feasible. For purposes

of this rule, alternative/renewable energy is defined as hydropower, wind and wave power, solar and geothermal energy and fossil fuel-based energy provided the emissions are no more than those from a fuel cell.

The proposed amendments apply to EGF projects for which a complete initial application for a permit to construct was filed in calendar years 2005, 2006, 2007 or 2008

Although the above summarizes the proposed amendments to Rule 1309.1, the proposal also encompasses the amendments to Rule 1309.1 adopted on September 8, 2006. As such, the Final Staff Report for the September 2006 adoption also supports the basis for this proposed amendment and is included as Attachment 2 of this report. The underline/strikeout version of Proposed Amended Rule 1309.1 reflects all proposed amendments since the May 3, 2002 amendment.

Since Rule 1315 is being re-adopted, the Staff Report for September 8, 2006 adoption of that rule is the supporting document for the re-adoption and is included as Attachment 3 of this report. The proposed rule is Rule 1315, as adopted on September 8, 2006, without change. For clarity, it is not shown in underline/strikeout format.

#### OTHER PROPOSED COMMITMENTS

In an effort to further mitigate any potential localized and regional air quality impacts of the proposed EGFs, staff will be making the following recommendations to the Governing Board as part of the adoption resolution:

- Invest mitigation fees in and around the communities most impacted by the proposed project
- Invest at a minimum one-third of the mitigation fees in renewable energy projects
- Set aside \$4,000,000 to identify and pilot the most advanced PM2.5 add-on control technologies that would further reduce PM2.5 emissions from EGFs
- Set aside \$1,000,000 from the mitigation fees collected to conduct a comprehensive energy resource planning analysis for the next 10 years and identify avenues to maximize renewable energy production in the Basin.

# **CEQA ANALYSIS**

Pursuant to the California Environmental Quality Act (CEQA) and AQMD Rule 110, the AQMD staff has reviewed the proposed project and determined the proposed amendments may have the potential to generate significant adverse environmental impacts. A Notice of Preparation/Initial Study (NOP/IS) was prepared and released for a 30-day public review and comment period from March 23, 2007 to April 24, 2007. Seven comment letters on the NOP/IS were received. Responses to the comments on the NOP/IS can be found in the Draft Program Environmental Assessment (PEA) which AQMD staff has released for a 45-day

public review and comment period. The Draft PEA is available by accessing the AQMD's CEQA web pages at <a href="http://www.aqmd.gov/ceqa/aqmd.html">http://www.aqmd.gov/ceqa/aqmd.html</a> or contacting the Public Information Center at (909) 396-2039.

#### SOCIOECONOMIC ANALYSIS

The AQMD staff is currently analyzing the socioeconomic impacts and the draft report will be made available to the public no later than 30 days prior to the public hearing.

# **AQMP AND LEGAL MANDATES**

The California Health and Safety Code requires the AQMD to adopt an Air Quality Management Plan (AQMP) to meet state and federal ambient air quality standards in the South Coast Air Basin. In addition, the California Health and Safety Code requires that the AQMD adopt rules and regulations that carry out the objectives of the AQMP. While Proposed Amended Rule 1309.1 and Proposed Re-adopted Rule 1315 are not control measures included in the AQMP, their requirements are consistent with the AQMP objectives. Since this proposal is not an AQMP control measure and does not result in emission reductions, cost effectiveness is not applicable. This proposal does not impose a new emission limit or standard, make an existing emission limit or standard more stringent, or impose new or more stringent monitoring, reporting or recordkeeping requirements, and therefore, is not subject to the comparative analysis provisions of California Health & Safety Code Section 40727.2. The proposal merely specifies the conditions for access to Priority Reserve credits. Rule 1315 formalizes the procedures for showing that all federal major sources are offset by credits from AQMD's bank.

#### **RESOURCE IMPACTS**

The proposed amendments as they relate to permitting of the EGFs are not anticipated to have a significant additional impact on staff resources. While the administration of the mitigation fee investment program is anticipated to be resource intensive, such costs are expected to be defrayed by utilizing up to 10 percent of the mitigation fees collected.

#### **FINDINGS**

Before adopting, amending or repealing a rule, the AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference, as defined in Health and Safety Code Section 40727. The draft findings are as follows:

**Necessity** – The AQMD Governing Board has determined that a need exists to replace Rule 1309.1 – Priority Reserve as amended on September 8, 2006 to limit or restrict

electrical generating facilities from accessing credits from the Priority Reserve if they are located in heavily polluted areas and to re-adopt Rule 1315, as amended on September 8, 2006, to formalize the process for establishing federal major source offset equivalency.

**Authority** – The AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Sections 40000, 40001, 40440, 42300 (permit system), and 40702 of the California Health and Safety Code.

Clarity – The AQMD Governing Board has determined that Rule 1309.1 – Priority Reserve, as proposed to be amended, and Rule 1315 – Federal New Source Tracking System, as proposed to be re-adopted, are written or displayed so that its meaning can be easily understood by the persons directly affected.

Consistency – The AQMD Governing Board has determined that Rule 1309.1 – Priority Reserve, as proposed to be amended, and Rule 1315 – Federal New Source Tracking System, as proposed to be re-adopted, are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.

**Non-Duplication** – The AQMD Governing Board has determined that Rule 1309.1 – Priority Reserve, as proposed to be amended, and Rule 1315 – Federal New Source Tracking System, as proposed to be re-adopted, do not impose the same requirements as any existing state or federal regulation and is necessary and proper to execute the power and duties granted to, and imposed upon, the District.

**Reference** – The AQMD Governing Board, in amending the rule, references the following statutes which the AQMD hereby implements, interprets, or makes specific: Health and Safety Code Sections 42300, 40920.5, and CAA §§ 171, 172 and 182.

#### CONCLUSIONS AND RECOMMENDATION

Staff recommends amendment of Rule 1309.1 to replace the amendments adopted on September 8, 2006, and re-adoption of Rule 1315 for the reasons stated in this staff report.

#### COMMENTS AND RESPONSE TO COMMENTS

The public outreach process for the post-September 8, 2006 rulemaking included one public workshop at AQMD Headquarters on April 19, 2007, one public consultation meeting on May 22, 2007, and several meetings with individuals and groups from the community, industry and other public agencies. In addition, a number of written comments were received prior to the close of comments for the workshops. Some of the comments were similar and have been summarized in the following comments and responses.

Comment: Establishing different health standards for EJ areas amounts to "redlining".

This policy shift is a significant change for the District.

Response: Staff crafted the proposed amendments that incorporate community,

regulatory, and industry concerns. Proposed Rule 1309.1 was developed to address access to the Priority Reserve for all EGFs, both large and small, base load and peaker. Based on the Governing Board's direction, staff established criteria to address and mitigate localized impacts from EGFs, particularly in those areas in the AQMD that are heavily polluted or are located in EJ areas. The proposal utilizes environmental justice criteria developed by AQMD, pursuant to California Health & Safety Code 43023.5 to determine those areas already disproportionately impacted by pollution, as requested by the communities impacted by the proposed EGFs. Those projects in less impacted areas, such as Zone 2, are subject to more stringent toxic standards than Zone 1, the least polluted area, and required to pay a higher mitigation fees. EGFs located in Zone 3 or in the EJ Area would be subject to significantly higher mitigation fees than in Zone 2. All the mitigation fees will be used to fund air quality projects in the area

impacted by the EGF project.

Comment: Earmarking 10% of the mitigation fees for administrative purposes is

excessive.

Response: District staff has committed to utilize the mitigation fees in the communities

most impacted by the EGFs. This commitment requires strict fiscal discipline in disbursing and administering the funds and necessitates long-term commitment in overseeing the development and execution of project contracts, which would be very resource-intensive. Based on its experience in administering the Carl Moyer Funding and other similar programs, staff believes that utilizing up to 10% of the mitigation fees for administrative purposes is reasonable and appropriate. Administrative policies relative to the disbursement of the mitigation fees will be developed through an open

and transparent public process with input from all stakeholders that will ultimately be submitted to the Board for its approval.

Comment: The 635 MW limit runs counter to City of Vernon objectives and precludes

large combined cycle power plants. The District should eliminate

limitations based on MW and instead base it on lb/hr of emissions.

Response: Rule 1309.1 was crafted to address access to the Priority Reserve for all

EGFs, both large and small, base load and peaker. In response to comments received during and after the Public Workshop on April 19, 2007, District staff has removed the 635 MW limit; however, due to community concerns regarding the impact of large EGFs, District staff has proposed more stringent requirements for power plants located in EJ area or Zone 3 that are larger than 500 MW. The new standards, while not limiting the power generating capacity of a given plant, do require that a plant operate at emission levels that are more stringent than current

applicable standards.

Comment: There is no set definition of "renewable energy" in any of the District rules.

Include the definition of "renewable energy" in Rule 1302.

Response: A definition of renewable energy has been included in Proposed Amended

Rule 1309.1(c)(5).

Comment: The tiered fee structure would cause a competitive disadvantage.

Response: The tiered fee structure is intended to discourage future power plants to

locate in areas where the public is exposed to the highest levels of

particulate pollutants.

Comment: Is due diligence required by downwind air basin projects?

Response: Downwind air basin projects will be required to conduct due diligence

before accessing the District Priority Reserve credits. District staff will also consult with downwind air basin air pollution control districts to determine the offset credits required for that project to only allow access and credit approval for the amount of credit required to offset. The access

will be limited to 5000 lbs/day.

Comment: Riverside Energy Project would be distributing the power generated to the

state grid system via the localized distribution system. Rule language needs

to be added to reflect this situation.

Response: Rule language has been added to PAR 1309.1(b)(4)(A) to reflect this. The

EGF definition includes thermal power plant facilities that generate 50MW or greater of electricity for distribution in the state or municipality owned

grid system (net generator).

Comment: For disbursement of mitigation fees, District staff should commit to work

with people who are already working on renewable energy projects.

Response: In order to achieve fair and equitable disbursement of mitigation fees,

District staff is committed to develop disbursement policies in an open and transparent process where all stakeholders are expected to provide input.

Comment: Over-regulation causes businesses to move out of state. The District should

not impose stringent conditions on power plants.

Response: The District is charged with providing cleaner air and reducing emissions

in the South Coast Air Basin. While new EGFs would help reduce the projected energy shortfall and are needed in the Basin, the localized and regional impacts from the EGF emissions cannot be ignored. PAR 1309.1 is crafted to strike a balance between the energy and economic needs of the

region and the health impacts due to the emissions from the EGFs.

Comment: The 635 MW limitation proposed in PAR 1309.1 presented at the April 19<sup>th</sup>

public workshop precludes large combined cycle power plants like the Vernon Power Project from being built. It would also encourage less

efficient simple cycle smaller plants.

Response: After taking into consideration the comments received, District staff has

removed the 635 MW limitation and added a set of stringent conditions for EGFs larger than 500 MW that are proposed to be located in Zone 3 or

EJA.

FIGURE 1
Three – Year Average (2003 – 2005) PM2.5 Concentration Zones in SCAQMD

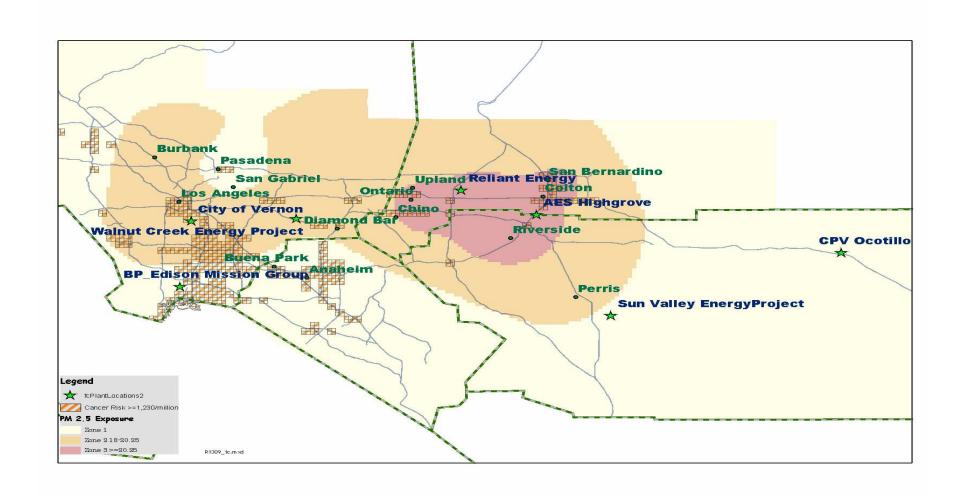
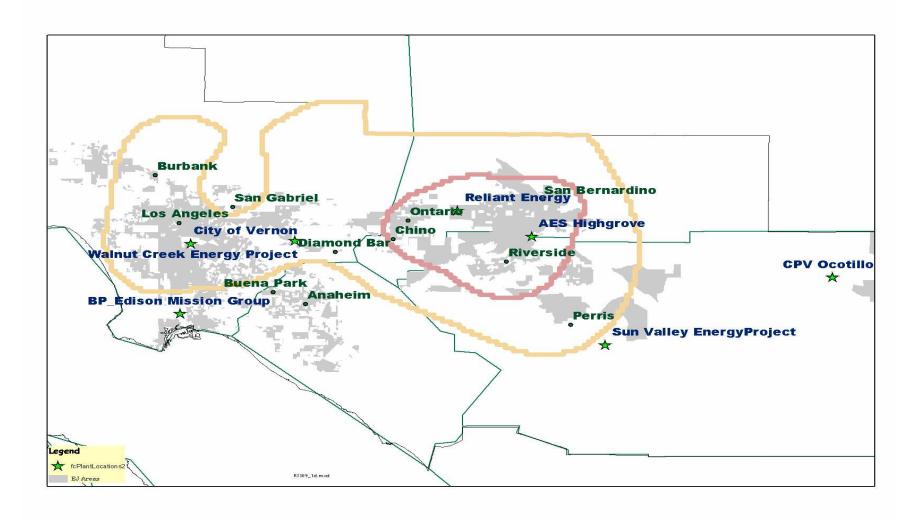


FIGURE 2
Environmental Justice Areas in the SCAQMD



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# **ATTACHMENT 1**

# GUIDANCE DOCUMENT FOR RULE 1309.1 PM2.5 CONCENTRATION ZONE DETERMINATIONS

#### **GUIDANCE DOCUMENT FOR RULE 1309.1**

#### **PM2.5** Concentration Zone Determinations

#### **Introduction:**

South Coast Air Quality Management District (AQMD) staff proposed and the AQMD Governing Board adopted amendments on September 8, 2006 to provide a limited time window for Electrical Generating Facilities (EGFs) to utilize credits from the Priority Reserve, provided they demonstrate that the required offsets are not reasonably available in the open market and meet other eligibility criteria and requirements. In adopting the amendments to Rule 1309.1, the Board directed staff to develop additional requirements for EGF projects proposing to locate in the more polluted areas within the District. In response to the Board directive, staff has developed additional criteria for those EGF projects seeking to purchase credits from the Priority Reserve and proposing to locate in more polluted areas.

For the purpose of Rule 1309.1, AQMD is subdivided into three geographic areas (zones) based on PM2.5 exposure levels. Specifically, Zone 1, 2, and 3 are defined as the areas with an average ambient PM2.5 concentration for years 2003 through 2005 of less than 18 µg/m<sup>3</sup>, between 18 and 20 μg/m<sup>3</sup>; and more than 20 μg/m<sup>3</sup>, respectively. Particulates and oxides of Nitrogen (NOx) are the two most important pollutants released by EGFs. Most of the particulates released from EGFs are expected to be in the fine particulate (PM2.5) fraction with regional and localized impacts. NOx emissions released from EGFs disperse regionally contributing to the formation of ozone downwind. Exposure to higher concentrations of PM2.5 is associated with adverse health impacts that are a lot more serious compared to the health impacts from NOx and other pollutants released by the power plants. Furthermore, the vast majority of the South Coast Basin is in non-attainment with the federal and state PM2.5 standards and the attainment date for the federal annual average standard is just a few years away (2014-2015). For the reasons described above, the PM2.5 exposure level is used as the key criterion to subdivide the District into three geographic zones and establish additional criteria and incentives to locate EGFs in less polluted areas in an effort to minimize public exposure and associated health impacts. The section below details the procedure followed in establishing these concentration zones.

#### **Process:**

#### 1. Data:

The data for this analysis is derived from data collected at AQMD monitoring stations for the years 2003-2005 and from selected stations of the California Air Resources Board (CARB) located outside the AQMD's boundary. Four other locations, San Nicholas Island, off San Clemente Island, Mojave Desert and upper San Bernardino County were added. Values for those locations were determined by AQMD modeling staff. In addition, several datasets were used in the analysis. They included an AQMD boundary shapefile and a polygon one kilometer grid file. Metadata for all data and map shape files is attached.

2. A point data file, consisting of the station data was created for the data.

- 3. Using the Geostatistical Analyst extension for ArcGIS, a surface layer was interpolated. This process uses the Inverse Distance Weighting modeling method (see modeling method properties). The model determined the grid size for the output and the resultant layer was classified smart quantiles with 10 classes. The surface layer was saved as a Geostatistical Analyst layer file.
- 4. Using the Prediction Tool of Geostatistical Analyst a value was predicted for each polygon in the grid file.
- 5. The grid file was then clipped to the AQMD boundary file and symbolized using three classes.

#### **Dataset Metadata files:**

- fcMasterStationList\_Data a personal Geodatabase Feature Class. fcMasterStationList\_Metadata.htm
- Xin1kUTM27.shp a shapefile; Xin1kUTM27\_Metadata.htm
- PM25ik.shp

   shapefile combining the polygon grid and predicted PM 2.5 values from the surface layer. pm251k metadata.htm

# Method Properties for Creation of Analysis Surface

Selected Method: Inverse Distance Weighting

**Method Parameter(s):** 

Power: 2

#### **Searching Neighborhood:**

**Neighbors to Include:** 29 (include at least 29)

**Searching Ellipse:** 

Angle: 0

Major Semiaxis: 1.0128 Minor Semiaxis: 1.0128

Sector Mode: 0

# ATTACHMENT 2 FINAL STAFF REPORT PROPOSED AMENDED RULE 1302 – DEFINITIONS, AND PROPOSED AMENDED RULE 1309.1 – PRIORITY RESERVE SEPTEMBER 8, 2006

# **NOTE**

THE ATTACHED STAFF REPORT IS PART OF THE BOARD PACKAGE SUBMITTED WITH THE SEPTEMBER 8, 2006 PROPOSED AMENDMENTS TO RULE 1309.1 WHICH IS BEING REPLACED BY THE JULY 13, 2007 VERSION. HOWEVER, THE ATTACHED STAFF REPORT INCLUDES RELEVANT INFORMATION CONCERNING THOSE PORTIONS OF THE SEPTEMBER 8<sup>TH</sup> AMENDMENTS THAT ARE BEING READOPTED AND IS THUS INCLUDED IN THE INFORMATION SUPPORTING THE JULY 13, 2007 AMENDMENTS.

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# **Final Staff Report**

Proposed Amended Rule 1302 – Definitions, and Proposed Amended Rule 1309.1 – Priority Reserve

September 8, 2006

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Assistant Deputy Executive Officer Planning, Rule Development and Area Sources Laki Tisopulos, Ph.D., P.E.

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#### SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

#### **GOVERNING BOARD**

Chair: WILLIAM A. BURKE, Ed.D.

Speaker of the Assembly Appointee

Vice Chair: S. ROY WILSON, Ed.D.

Supervisor, Fourth District

Riverside County Representative

#### **MEMBERS**:

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Supervisor, Fifth District

Los Angeles County Representative

JANE W. CARNEY

Senate Rules Committee Appointee

RONALD O. LOVERIDGE

Mayor, City of Riverside

Cities Representative, Riverside County

**GARY OVITT** 

Supervisor, Fourth District

San Bernardino County Representative

JAN PERRY

Councilmember, 9<sup>th</sup> District

Cities Representative, Los Angeles County, Western Region

MIGUEL PULIDO

Mayor, City of Santa Ana

Cities Representative, Orange County

TONIA REYES URANGA

Councilmember, City of Long Beach

Cities Representative, Los Angeles County, Eastern Region

JAMES SILVA

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CYNTHIA VERDUGO –PERALTA

Governor's Appointee

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Mayor, City of Chino

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#### **EXECUTIVE OFFICER**

BARRY R. WALLERSTEIN, D.Env.

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# **NOTE**

THE ATTACHED STAFF REPORT INCLUDES AMENDMENTS WHICH ARE NO LONGER BEING PROPOSED BY STAFF TO BE ADOPTED AT THE SEPTEMBER BOARD MEETING. ONLY THOSE AMENDMENTS PERTAINING TO ELECTRICAL GENERATING FACILITIES (EGFs) ARE CURRENTLY PROPOSED FOR ADOPTION. STAFF WILL RETURN TO THE BOARD WITH APPROPRIATE RECOMMENDATIONS FOR THE REMAINDER OF THE PRESENTLY PROPOSED AMENDMENTS AT A LATER DATE.

#### **EXECUTIVE SUMMARY**

While new electrical generating facilities (EGFs) have steadily been coming on-line since 2001, the prospect of electrical power shortages in Southern California and the South Coast Air Basin (Basin) in particular continues. Factors contributing to potential shortages in the Basin include increasing power demand, the retirement of some older EGFs and limitations of the power grid system in allowing the transfer of power from northern California to southern California. Siting of approximately 2,500 megawatts (MW) of new electrical power generation has been proposed in the Basin and in downwind air basins. Projects have also been proposed that are of regional significance, such as the LNG terminal and the construction of other energy-related projects in the ports. These projects are essential for maintaining the economic soundness of the region even as growth continues to place severe potential demands on the region's increasing energy needs. Increasing demand is also being placed on waste management in the region as processing options become more constrained with limitations on landfills and reluctance in investing in riskier unproven solutions such as deep well injection and gasification. Private and public/private partnered biosolids projects are one solution proposed for addressing the waste management issue. All these proposed projects will require emissions offsets. At the same time there continues to be a shortage of emission reduction credits (ERCs), specifically SOx, PM-10 and CO in the open market. Staff proposes that Rule 1309.1 be amended to provide a limited time window for electrical generating and regionally significant projects to utilize credits from the Priority Reserve, provided they demonstrate that the required offsets are not reasonably available in the open market. These projects and non-public biosolids processing facilities would pay a mitigation fee and adhere to certain other requirements of the rule, including a 1.2 to 1.0 offset ratio, in order to have access to offsets from the Priority Reserve.

Electrical generating projects in downwind basins would also be provided an opportunity to purchase VOC credits for use in siting these facilities. VOC credits obtained from the Priority Reserve for downwind basin projects, subject to certain conditions, may be utilized to offset other criteria pollutant emissions by use of the inter-pollutant credit trading mechanism. Existing state law provides for the inter-basin transfer of credits and Proposed Amended Rule 1309.1 would incorporate state law requirements into this interbasin use of Priority Reserve credits.

Staff is proposing that the definition of an essential public service be amended to make explicit that biosolids processing at exclusively-publicly owned and publicly operated facilities are essential public services. Staff is also moving the definition of EGF from Rule 1309.1 to Rule 1302.

#### **BACKGROUND**

#### **Rule 1302 – Definitions**

Rule 1302 defines terms and phrases used in Regulation XIII (including Rule 1309.1).

The proposed amendment will move the definition of an EGF to Rule 1302 from Rule 1309.1 and explicitly include in the definition of essential public services exclusively-publicly owned and publicly operated biosolids processing facilities. Other new definitions include Energy Projects of Regional Significance (EPRS), Biosolids, Biosolids Processing Facility and Wobbe Index and definitions of the terms Offset Ratio, Orphan Reduction and Orphan Shutdown used in PR 1315 – NSR Tracking. Proposed Rule 1315 – NSR Tracking will be the subject of a separate public hearing for adoption.

# Rule 1309.1 – Priority Reserve

At the April 2001 Public Hearing, Rule 1309.1 – Priority Reserve was amended to allow EGFs temporary access to the Priority Reserve to obtain SO<sub>2</sub>, CO and PM-10 credits. California had been experiencing a shortage of electricity for over a year with some Stage 3 shortages (power reserves of less than 1.5%) and rolling blackouts occurring in 2001, and the demand for offsets in the open market exceeded the available supply. accommodate EGFs access to the Priority Reserve while maintaining reasonable reserves for other sources, particularly essential public services, credits totaling 750 lb/day of SO<sub>2</sub> and 6,000 lb/day of CO were transferred into the Priority Reserve from the AQMD's New Source Review (NSR) account exclusively for EGF use. Access by EGFs was subject to certain criteria, including paying a non-refundable mitigation fee. Furthermore, the amendments established that the Executive Officer (EO) would be able to transfer up to 1,500 lb/day of PM-10 credits into the Priority Reserve from the NSR account after a public meeting. The provisions regarding the transfer and availability of credits to the Priority Reserve for use exclusively by EGFs expired on December 31, 2003. December 31, 2003 all credits previously transferred into the Priority Reserve or reserved in the Priority Reserve for exclusive use by EGFs were either transferred or released back to the District's NSR account.

The California Energy Commission (CEC) permits all power projects rated at or above 50 megawatts. State regulations give sole permitting authority including local land use and environmental regulations to the CEC. The CEC does require that all power projects meet all air quality regulations. For the AQMD, the main regulation affecting the permitting of power projects is New Source Review (Regulations XIII and XX). NSR requires that all projects satisfy Best Available Control Technology (BACT), modeling, offset, and public notice requirements. One potentially problematic area for power projects in the Basin has been and continues to be obtaining adequate offsets.

In accordance with state law, all emission increases from new and modified facilities must be offset. Under District rules most facilities with a potential to emit of greater than 4 tons per year of SOx or PM-10 or 10 tons per year of CO are required to provide external offsets. External offsets are almost always in the form of ERCs. ERCs are created through the shutdowns or over-control of processes. ERCs are only granted for that portion of emissions which exceed current AQMD BACT standards are not otherwise required by rule, regulation, law, approved Air Quality management Plan Control Measure, or the State Implementation Plan. The ERC generation procedures coupled with the fact that stationary sources are relatively small contributors to the Basin's SOx, CO, and PM-10 inventory, have been limiting factors in generating significant amounts of ERCs.

In 2005, despite new EGF projects, California once again experienced some Stage 2 shortages (power reserves down to 5%) and the outlook for the foreseeable future is that demand for electrical power will continue to increase. The increase in demand is due to several factors including increased consumption and retirement of older EGFs. There are also limits on the amount of electrical power that can be imported into the southern California region from northern California and Arizona due to bottlenecks in transmission lines. New EGFs are needed in the local region. The proposed amendments once again provide new EGFs access to the Priority Reserve where these proposed projects either do not have or can not secure the needed offsets on the open market.

The proposed amended rule also extends the types of projects that may qualify for access to the Priority Reserve based on specific criteria in the rule. Projects added are, EGFs Downwind of the District with a less severe non-attainment status and energy projects considered to be of regional significance. Major energy projects necessary for the economic vitality of the Basin are being proposed to have access to the Priority Reserve. These projects are of such significance that they warrant special consideration to facilitate siting. Also, private and public/private partnered biosolids projects are essential to mitigating the growing issue of waste management in the Basin. Staff proposes that the Priority Reserve be used to facilitate these needed projects.

# PROPOSED AMENDMENTS TO RULE 1302 – DEFINITIONS and RULE 1309.1 – PRIORITY RESERVE

The proposed amendments to the rules are designed to provide access to the Priority Reserve for certain critical projects that meet specific requirements and that cannot secure the needed offsets on the open market. Also, the amendment explicitly lists exclusively-publicly owned and operated biosolids processing facilities in the definition of an essential public service and include definitions of biosolids, biosolids processing facility, an EGF, EPRS, Wobbe Index, Offset Ratio, Orphan Reduction and Orphan Shutdown. Specifically, the amendments are summarized as follows:

# **Proposed Amendments to 1302 – Definitions**

- 1. The current definition of an EGF is moved for administrative purposes from Rule 1309.1 to Rule 1302. An EGF is a facility that generates electricity for its own use and is less than 10 Megawatts (MW); or for a facility within the Basin less than 50 Megawatts (MW) that generates not less than 30% of its electricity to pump water to maintain the integrity of the surface elevation of a municipality or significant portion thereof; or is a facility that generates electricity for distribution in the state grid system (net generator).
- 2. Biosolids are defined as the nutrient-rich organic material resulting from the treatment of sewage sludge.
- 3. Biosolids Processing Facility means an operation that further treats solids generated from wastewater treatment occurring exclusively in the District. To ensure that wastewater treatment solids will not be imported from other regions for processing, the Permit to Construct and Operate will include conditions limiting the operation to the use of only those wastewater solids generated from water treatment in the Basin. Biosolids processing facilities may be publicly owned and operated, private or a public/private partnership. However, different requirements apply for the exclusively-publicly owned and publicly operated operations.
- 4. Electrical Generating Facility previously described in Rule 1309.1 is moved to Rule 1302 as a definition and also includes municipalities generating electrical power for use by their own residents as a net generator.
- 5. Energy Projects of Regional Significance (EPRS) are defined as projects of regional impact to enhance the import supply in the District of crude oil or natural gas with a Wobbe Index of no more than 1360 (measured at the point that the natural gas enters the distribution system) and that are sized no less than 150,000 barrels per day per project or 250 million cubic feet of natural gas per day per project. Such regional projects will be limited to LNG and crude oil projects and that are also anticipated to increase the volume and flow of such products into the region appreciably, hence the minimum project size requirements. Electrical power generation is increasingly being achieved by the use of natural gas, which is largely imported into the region. It is anticipated that increasing the flow and volume of such products into the Basin will help alleviate any potential electrical power and other projected energy shortages and so serves the same goals as allowing EGFs access to the Priority Reserve.
- 6. Exclusively-publicly owned and publicly operated biosolids treatment facilities are explicitly added to the definition of an essential public service and are an essential

alternative to other forms of waste disposal. This waste management approach is becoming increasing popular as other alternatives such as landfills decline. This amendment addresses the issue that this form of waste management is anticipated to increase into the future. Biosolids processing taking place at publicly owned or operated sewage treatment facilities are already covered as sewage treatment facilities and are currently classified as essential public services. Exclusively-publicly owned and publicly operated biosolids operations not located at sewage treatment facilities receiving credits under PAR 1309.1 as an essential public service will have their Permit to Construct and Operate conditioned to ensure ownership exclusive and operation as a public agency. Public facilities that become non-public will require new permits. Private and public/private biosolids processing facilities including public facilities that become non-public may have access to Priority Reserve credits provided they meet the requirements including payment of mitigation fees and an offset ratio of 1.2 to 1.0.

- 7. The following terms used in Proposed Rule 1315 NSR Tracking are defined: "Offset Ratio" means the ratio of the quantity of offset credits provided (in pounds per day) to offset an increase in potential emissions to the magnitude of the increase in potential emissions (in pounds per day); "Orphan Reduction" means any reduction in actual emissions from a permitted source within the AQMD resulting from a physical change to the source and/or a change to the method of operation of the source provided the change is reflected in a revised permit for the source and provided such reduction is not otherwise required by rule, regulation, law, approved Air Quality Management Plan Control Measure, or the State Implementation Plan and does not result in issuance of an ERC and "Orphan Shutdown" means any reduction in actual emissions from a permitted source within the AQMD resulting from removal of the source from service and inactivation of the permit without subsequent reinstatement of such permit provided such reduction is not otherwise required by rule, regulation, law, approved Air Quality Management Plan Control Measure, or the State Implementation Plan and does not result in issuance of an ERC.
- 8. Wobbe Index is the higher heating value of a gas divided by the square root of its specific gravity, expressed in units of BTU per standard cubic foot. Qualifying EPRS that increase the import supply of natural gas in the District, cannot introduce natural gas into the distribution system with a Wobbe Index greater than 1360.

#### Overview of Proposed Amendments to Rule 1309.1 – Priority Reserve

1. The reference to Sulfur Dioxide (SO<sub>2</sub>) in the rule is more accurately amended to Sulfur Oxides (SOx).

- 2. Currently the rule specifies that funding of the Priority Reserve shall be quarterly "or other schedule deemed practicable by the (EO) or designee". Emphasis is provided by new language that this includes suspension by the EO of transfers from the District's NSR account if the credits are not available, and resume when the EO determines sufficient credits are available for transfer from the District's NSR account.
- 3. The following new source types that have filed a complete application in calendar years 2005, 2006, 2007 or 2008 are proposed as eligible for access to Priority Reserve:
  - a. Electrical Generating Facilities which are currently a single category will be split into two new categories "in-Basin EGF" and "EGF in Downwind Air Basins". Qualified in-Basin EGFs may only draw from available Priority Reserve SOx, PM-10 and CO credits subject to paying the appropriate mitigation fee, a 1.2 to 1.0 offset ratio and complying with other requirements. In-Basin EGFs that submitted a complete Initial Application for Certification with the CEC or a complete permit application in calendar years 2000 through 2003 pay the mitigation fees in effect in the rule adopted May 3, 2002. In-Basin EFGs that submit a complete Initial Application for Certification or a complete application for a permit in calendar years 2005, 2006, 2007 or 2008 must pay mitigation fees of \$50,417, \$15,033 or \$12,000 per pound for PM-10, SOx and CO respectively and the above mitigation fees are to be adjusted annually by the California Consumer Price Index for applications submitted in 2006, 2007 and 2008. Qualified EGFs in Downwind Air Basins may only draw from the available pool of Priority Reserve VOC credits and must meet California Health and Safety Code requirements for inter-basin trading.
  - b. Energy Projects of Regional Significance (EPRS) which are energy related projects that enhance the supply of natural gas or crude oil in the Basin as defined in Rule 1302. Qualified EPRS may only draw from available Priority Reserve SOx, PM-10 and CO credits subject to paying the appropriate mitigation fee, a 1.2 to 1.0 offset ratio, and complying with other requirements. Energy projects located in the Coastal Waters adjacent to the AQMD that are subject to federal permitting requirements and meet all other requirements that an on-shore EPRS must meet will qualify to draw credits provided the applicant submits an application to the Executive Officer at the time applications are filed for federal permits.
- 4. The proposed amendments to Rule 1302 explicitly list biosolids processing facilities that are exclusively-publicly owned and publicly operated as essential

public services. Biosolids processing facilities may also be privately owned or operated or may be a public/private partnership. These non-public biosolids processing facilities may be eligible for Priority Reserve Credits. Qualifying non-public biosolids facilities may only draw from the available pool of Priority Reserve SOx, PM-10 and CO credits subject to paying the appropriate mitigation fee, a 1.2 to 1.0 offset ratio, and complying with the same requirements as publicly owned and operated biosolids facilities. If an exclusively-publicly owned and operated and becomes a non-public facility, the applicant must provide offsets at a 1.2 to 1.0 ratio and pay the mitigation fee in effect at the time of conversion or surrender an equivalent amount of offset credits.

- 5. The provision requiring the transfer of Carbon Monoxide (CO) into the Priority Reserve account, for use exclusively by EGFs, on a one time basis is eliminated, however qualifying EGFs and EPRS may have access to available Priority Reserve CO credits. Access to CO credits similar to SOx and PM-10 credits will be contingent on the availability of credits in the District's NSR account.
- 6. Rule 1309.1 as adopted on May 3, 2002 established specific requirements for EGFs in addition to the mitigation fees, and the 1.2 to 1.0 offset ratio of this proposal. Several of these additional requirements are also applicable in this proposal to both the in-Basin EGFs and the EPRS. These requirements include that the facility use BARCT for all existing sources emitting the same air contaminant at the facility, that all sources under common ownership within the AQMD are in compliance with AQMD requirements, the applicant conducts a due diligence effort for offsets prior to seeking Priority Reserve credits up to the point Priority Reserve credits are issued and the source is fully operational at rated capacity within three years of the latter of Permit to Construct issuance or initial California Energy Commission certification. The applicant may seek an extension of the three years from the AQMD Governing Board if it is demonstrated that the extension is necessary due to circumstances beyond the reasonable control of the applicant. The AQMD Governing Board may grant an extension based on the evidence presented at a duly noticed public hearing on the extension request.
- 7. Additional requirements in the May 3, 2002 version of Rule 1309.1 that applied exclusively to EGFs and maintained in this proposal include that the EGFs enter into a long-term (at least one year) contract with the State of California to sell at least 50% of the portion of the power which it has generated using the Priority Reserve credits, provided the EO determines at the time of permitting, and based on consultation with State power agencies, that the state of California is entering into such long-term contracts and that a need for such contracts exists at the time of permitting, if the facility is a net generator (this subsection does not apply to

- municipal utilities or joint powers authorities). In addition, the in-Basin EGF that submitted complete permit applications in 2000 through 2003, must comply with all terms and conditions in any EO order, whether expired or not, relating to the EGFs access of Priority Reserve credits, whether such credits are used or not.
- 8. EGFs that filed a complete application prior to calendar year 2004 may access the Priority Reserve for CO, SOx, and/or PM-10 credits as allowed when the December 6, 2002 amendment to Rule 1309.1 was in effect. In that amendment EGF projects were limited to a maximum combined total draw of 750 lbs/day for SOx and 6,000 lbs/day for CO. In-Basin EGFs that filed a complete application in calendar year 2005 or file in 2006, 2007 or 2008 may access the Priority Reserve for SOx, PM-10, and CO credits to the extent they are available in the Priority Reserve subject to the set aside amounts reserved exclusively for essential public services.
- 9. Access to Priority Reserve credits for qualifying projects except EGFs in downwind air basins, shall be prioritized based on the earliest date that the permit to construct is to be issued. Access to the Priority Reserve for EGFs in downwind air basins is based on the date the written request to receive credits is received by the Executive Officer.
- 10. Based on imminent public health or safety needs regardless of date of application submitted, the EO, may determine specific project priority. Previously the rule required the AQMD Governing Board to make this determination.
- 11. A set-aside total of 400 pounds per day of PM-10, 800 pounds per day of CO and 200 pounds per day of SOx is exclusively reserved for use by essential public services each calendar year to ensure credits will be available to them.
- 12. The paragraph limiting EGFs to a total of 750 pounds per day of SOx and 6000 pounds per day of CO has been deleted. Subject to the set-asides reserved for essential public services, in-Basin EGFs, applying in 2005 through 2008, may have access to PM-10, SOx and CO credits to the extent they are available in the Priority Reserve.
- 13. The EO shall monitor the PM-10, CO and SOx balances in the Priority Reserve and in the event the balance of PM-10, CO or SOx is less than 500 pounds per day or there is a project that will reduce the credits to less then 500 lbs/day the EO may transfer up to 1,500 pounds per day of PM-10, CO or SOx to the Priority Reserve after it is determined the credits are available from the District's NSR account. A public hearing is not necessary for this transfer. The amounts to be transferred should be sufficient based upon past experience and projected demand.

- 14. Offset credits obtained from the Priority Reserve and used in the District may not be used to generate interpollutant credits.
- 15. The subdivision addressing California Health and Safety Code §42314.2 has been deleted since this provision is no longer applicable.
- 16. A new subdivision has been added addressing mitigation fees and these fees will be dependant upon the date the complete application is submitted and if it is an out of the Basin EGF. EGFs with complete applications filed in 2000, 2001, 2002 or 2003 will pay the mitigation fees in effect when Rule 1309.1 was amended in 2001, of \$25,000, \$8,900 or \$12,000 per pound per day of PM-10, SOx and CO An in-Basin EGF or an EPRS that filed a complete Initial respectively. Application for Certification to the CEC or a complete permit application with the AQMD in Calendar years 2005, 2006, 2007 or 2008 and non-public biosolids processing facilities will pay mitigation fees of \$50,417, \$15,083 and \$12,000 per pound per day of PM-10, SOx and CO respectively. The mitigation fee for an EGF in a downwind air basin is \$1,410 per pound per day of VOC. The proposed mitigation fees for PM-10 and SOx are based on the weighted average cost of ERC transactions for calendar year 2005. The proposed mitigation fee for VOC is based on the weighted average of ERC transactions from 2002 through 2005 since that period is more representative of recent market events for that air contaminant. The weighted average was then adjusted by an additional 5 percent to recover the internal cost of additional administrative efforts. Because of the scarcity of CO credits, staff recommends maintaining the initial mitigation fee for CO at \$12,000 per pound per day as the most representative for all qualifying years. Furthermore, all the mitigation fee rates will be adjusted each year on July 1, by an amount equivalent to the change in the California Consumer Price Index for the previous calendar year, beginning in July 2007.
- 17. A refund of 80 percent of mitigation fees up to a maximum non-refundable amount of two million dollars (\$2,000,000) per project, where the project is cancelled for in-Basin EGFs and EPRS that filed complete permit applications for which credits were sought in 2005, 2006, 2007 or 2008, and non-public biosolids processing facilities may be granted under certain circumstances described below. This refund provision is a new provision that was not available under the 2002 amendment but has been incorporated into this amendment in response to the comments received that a project may not go through for legitimate reasons, beyond the control of the project proponent. The non-refundable portion of the mitigation fee is designed to provide, primarily, a disincentive to adversely impacting the availability of credits to legitimate projects by applying with projects that are not genuine. It is believed that the \$2,000,000 maximum is a sufficient deterrent. Potential projects include: retrofitting diesel powered school buses with

particulate traps or oxidation catalysts (NOx, VOC, PM-10), replacement of existing diesel school buses with new alternative-fueled school buses i.e. CNG engines (NOx, PM-10), re-powering of off-road heavy-duty diesel equipment with new lower-emission diesel engines and with particulate traps (PM-10, NOx), replacing portable diesel generators with micro-turbines (PM-10, NOx), providing low-sulfur diesel fuel to local locomotives (SOx, PM-10), expanding LNG refueling infrastructure (NOx, PM-10, SOx). Additional programs and projects designed to reduce emissions include: purchase of fuel cells and electrification usage with ships at the dock (all pollutants), retrofitting other diesel mobile sources with particulate traps or oxidation catalysts (PM-10, NOx), conversion of other diesel engines to alternative fuels (PM-10, NOx, SOx), conversion of lawn and garden equipment to battery and electric operated (NOx, PM-10, VOC, CO) and demonstration or deployment of new emission reducing technology. The 20 percent fee is required to discourage a cancellation of offsets reserved and to ensure that air quality improvement projects can be identified and developed prior to or as close as practicable to the operation of the EGF. By not assessing this fee, an unacceptable level of uncertainty is imposed that would inhibit these monies from being spent and thereby delay air quality improvement.

A refund is not authorized for EGFs that filed permit applications in 2000, 2001, 2002 or 2003 and EGFs in a downwind air basin. A refund also is not authorized for the purchase of excess Priority Reserve credits.

A written request for a refund explaining the reasons for the project cancellation must be submitted to the Executive Officer within one year from the purchase of the Priority Reserve credits, demonstrating the cancellation is beyond the reasonable control of the applicant. The Executive Officer must receive the written request no later than 30 days after the project cancellation.

The credits that are the subject of the refund will be returned to the District's NSR account.

#### **CURRENT ESTIMATED DEMAND FOR OFFSETS**

## Estimated Emission Credits to be Withdrawn from Priority Reserve

	PM10 (lbs/day)	SOx (lbs/day)	VOC (lbs/day)	CO (lbs/day)	NOx (lbs/day)
In-Basin EGFs: (2000MW Projects)	3,585	365	1	8,203	
Energy Projects	200	1,114		417	
Out-of-Basin EGFs			< 5500		
Biosolids projects (present to 2010)	40		904	207	41
Biosolids Projects (2010 to 2020)	22		491	113	22
TOTAL (before 2010)	3,825	1,479	6,404	8,827	41
TOTAL (after 2010)	22		491	113	22

(Source: Based on SCAQMD's Federal Offset Account-Ending Balance, Table 1; SCAQMD Governing Board Agenda Item 25, April 2, 2004)

#### **CEQA ANALYSIS**

AQMD staff has reviewed the proposed amended Rule 1309.1 pursuant to state CEQA Guidelines §15002 (k)(3) and an Initial Study (IS) was prepared, pursuant to CEQA Guidelines §15063, and along with the Notice of Preparation (NOP), pursuant to CEQA Guidelines §15082, circulated for a 30-day public review and comment period from February 16, 2006 to March 17, 2006. The IS/NOP concluded the proposed amendments could result in a potential significant adverse air quality impact if the mitigation fee collected to fund emission reduction projects is unable to produce emission reductions an amount equal to the amount of credits used by newly eligible projects. In addition, this potential shortfall of emission reductions may exceed the AQMD's PM-10, SOx and CO daily operational significance thresholds. A Draft Environmental Assessment (EA) has been prepared to further analyze the adverse air quality impact from the proposed project, as well as from alternatives to the project. No other environmental topic area is considered to have an adverse impact as a result of the proposed project. Six public comment letters were received on the IS/NOP and responses to the comment letters were included in the Draft EA. The Draft EA was circulated for a 45-day public review and comment period from June 30, 2006 to August 15, 2006.

#### **SOCIO-ECONOMIC IMPACTS**

A socioeconomic analysis of the amendments to Rule 1302 and Rule 1309.1 has been performed and is included as an attachment to the Board letter recommending adoption of the proposal. The socioeconomic impacts associated with the CEQA alternatives have also be analyzed.

# **AQMP AND LEGAL MANDATES**

The California Health and Safety Code requires the AQMD to adopt an Air Quality Management Plan (AQMP) to meet state and federal ambient air quality standards in the South Coast Air Basin. In addition, the California Health and Safety Code requires that the AQMD adopt rules and regulations that carry out the objectives of the AQMP. While Proposed Amended Rule 1309.1 is not a control measure included in the AQMP, its requirements are consistent with the AQMP objectives.

#### **RESOURCE IMPACTS**

The proposed amendments are not anticipated to have a significant impact on staff resources.

#### COMMENTS AND RESPONSE TO COMMENTS

**Comment:** The "due diligence" provision should be eliminated or specify a cut-off or final due date. EGFs need to have certainty regarding the price and timing of offset purchases from the Priority Reserve. Also, in order to obtain California Energy Commission (CEC) approval EGFs must demonstrate that they have the required project offsets.

Response: EGFs and EPRS are required to demonstrate that they have conducted a due diligence by the earliest date practicable and up to the time the credits are purchased from the Priority Reserve. This is necessary to ensure the priority reserve is a "bank of last resort". This does not preclude facilities from continuing to seek out a more cost-effective source of offsets up until the time the offsets for the project must be in place, however due to the potentially limited supply of offsets from the Priority Reserve and to maintain equity the offsets are made available on a first come first serve basis. It is staffs understanding also that the CEC which must license all power projects greater than 50 megawatts only requires that the anticipated source of credits be identified but that there is no requirement to have the credits on hand at the time an application is filed. They do need to provide the credits at the time CEC issues its approval of the license.

**Comment:** The requirement for EGFs or EPRS to be on-line within 3 years from the date of initial application is too aggressive.

Response: There are a limited number of Priority Reserve offset credits available. The goal of the proposed amendments allowing EGFs and EPRS access to the Priority Reserve for offsets is to expedite the construction and operation of new power generation or energy capacity as quickly as possible in order to mitigate the anticipated shortage of power in the near future. The three year term in the current rule is intended to promote new generation and other energy projects to come on line at the soonest possible date. The three year term does not commence by the initial permit application date but rather from the issuance of a Permit to Construct or an initial California Energy Commission certification, whichever is later. Furthermore, the applicant can seek an extension from the AQMD Governing Board beyond the initial three-year period, provided it is demonstrated to be necessary due to the circumstances beyond the reasonable control of the applicant.

**Comment:** In the event that the actual operating emissions from a EGF project are less than the expected emissions EGFs should be able to sell surplus offsets obtained from the Priority Reserve back to the Priority Reserve.

Response: The scarcity of available offsets and the potential commitment of mitigation fees to projects would not make a sell back of surplus credits feasible. Mitigation fees are used to fund emission reduction projects. To allow a refund for up to several years after the credits are purchased will require the AQMD to wait those same several years to fund emission reduction projects with the fees or risk providing a refund when the fees have already been spent on emission reduction projects. Neither option is acceptable. Furthermore, permits are issued for the potential to emit as opposed to actual equipment/facility emissions.

**Comment:** The state is not currently entering into long term contracts for the purchase of electrical power. This language should be removed from the rule. If not removed it should be clear the requirement applies only to net generators.

Response: The specific language in the rule reads "enters into a long-term (at least one year) contract with the State of California to sell at least 50% of the portion of the power which it has generated using the Priority Reserve credits and provided the EO determines at the time of permitting, and based on consultation with State power agencies, that the state of California is entering into such long-term contracts" and also only if "a need for such contracts exists at the time of permitting". If the state is not entering into contracts or there is no need, the Executive Officer will not require a contract. However, the option should remain if the state does start to enter into such contracts in the future. The requirement applies only to net generators.

**Comment:** EGFs and EPRS will typically require much larger quantities of offsets as compared to other facilities. The mitigation fee charged to EGFs for offsets from the Priority Reserve should be set a price lower than that of privately traded ERCs sold in the open market.

**Response:** Staff has assessed various pricing mechanisms for setting the price of mitigation fee offsets. There must, however, be equity in the price paid by facilities accessing the Priority Reserve. Staff has determined that a sales weighted average price is a reasonable approach of establishing the mitigation fee level. In addition, the Priority Reserve mitigation fee is intended to encourage use of Priority Reserve offsets as a last resort. If other facilities have recently paid a higher price for ERCs obtained in the open market it would not be either equitable or a disincentive to open up access to

the Priority Reserve for EGFs at a mitigation fee discounted from market ERC prices.

**Comment:** WOBBE Index is not defined.

**Response:** A definition of WOBBE Index has been added to Rule 1302.

**Comment:** EPRS located in Southern California Coastal Waters or the Outer Continental Shelf Waters should be eligible for credits from the Priority Reserve.

**Response:** Projects in Coastal Waters are federally permitted sources. Such sources in these waters immediately adjacent to the AQMD boundaries are to be treated the same as similar on-shore facilities for access to the Priority Reserve provided they also submit an application to the AQMD. Language has been added to PR 1309.1 to clarify this.

**Comment:** Staff should confirm the quantity of credits made available to the priority reserve and that the amount of credits is sufficient for all requesting projects.

**Response:** Staff has identified the quantity of credits required for known potential projects and anticipates sufficient credits will be available for these and some unanticipated projects. Staff cannot guarantee that credits will be available for all unanticipated future projects. Accessibility to the Priority Reserve is contingent only to the extent the Executive Officer determines that sufficient credits are maintained in the District's NSR account.

**Comment:** Only certain EGF projects are required to file for certification from the CEC. It should be clear that Rule 1309.1 does not require such a filing if it is not required.

**Response:** Projects less than 50 megawatts do not require CEC certification. There is no requirement in PAR 1309.1 that requires such projects file for CEC certification nor was it staff's intent to require so.

**Comment:** The deadline for filing applications for EGFs and EPRS should be extended beyond 2007.

**Response:** There are a limited number of Priority Reserve credits available. The proposed amendments allowing EGF and EPRS projects access to the Priority Reserve and limitation on submittal is to promote construction and operation as quickly as possible in order to mitigate the anticipated energy shortage in

the near future. The power shortage has been projected to continue through 2010. PAR 1309.1 has been amended to extend the filing period through 2008. This would allow additional time for project submittal and still result in most projects coming on line by 2010. In addition staff will commit to language in the adopting resolution to monitor the status of project installation and report back to the Board if an extension of the 2008 date is appropriate.

**Comment:** EPRS, in-Basin EGFs and non-public biosolids processing facilities should not be required to purchase credits from the Priority Reserve at a 1.2 to 1.0 offset ratio.

**Response:** The 1.2 to 1.0 offset ratio for these privately owned and operated projects establishes equity with all other projects that must acquire offsets on the open market at 1.2 to 1.0 offset ratios. Besides, in demonstrating the equivalency of its NSR program to the Federal NSR requirements, AQMD is required to debit its NSR account an offset ratio of 1.2 to 1.0 for such sources.

**Comment:** For an EGF constructed at an existing source, clarify that the "existing sources" which must meet BARCT in order to access the Priority Reserve are limited to sources directly related to the production of electricity at the subject facility.

**Response:** The Priority Reserve is intended to be a "bank of last resort". The BARCT retrofit requirement is intended to apply to all equipment or operations at the existing facility that emit the same air contaminants as those requested from the Priority Reserve, not just those directly related to the production of the electricity.

**Comment:** Clarify that the prohibition of credit transfer does not apply if the project is transferred to another location provided there is not a change of operator.

**Response:** Permits to Construct are not transferable from one location to another. The Permit to Construct at the old location would be cancelled and a new application for a Permit to Construct would be required for the new location. The project proponent may be eligible for a partial refund for purchased credits if the requirements for refund in PAR 1309.1 are met. The project for the new location would be placed in the Priority Reserve queue as indicated in PAR 1309.1.

**Comment:** Clarify that a change of operator or name change will not affect position of an application in the Priority Reserve queue.

**Response:** A name change will not affect the application for Permit to Construct and therefore will not affect position in the queue. A change of operator prior to issuance of a Permit to Construct and commencement of construction will result in cancellation of the application for a Permit to Construct. A new application for Priority Reserve credits and a Permit to Construct will be required from the new operator. Position in the queue, except for EGFs in a downwind air basin, will be based upon the date the Permit to Construct is to be issued.

**Comment:** Clarify that submittal of additional applications for a project will not affect the position in the Priority Reserve queue of other previously submitted applications for the same project.

**Response:** Position in the Priority Reserve queue, except for EGFs in downwind air basins is based upon the date the Permit to Construct is to be issued. The position in the queue for the additional applications will be based upon the date their Permits to Construct are to be issued.

**Comment:** Projects located in downwind air basins should be eligible for access to the Priority Reserve.

**Response:** PAR 1309.1 allows limited access to VOC credits in downwind air basin under certain circumstances.

**Comment:** The required approval of the credit transfer by the SCAQMD for the joint power project with the cities of Victorville and Palmdale should occur simultaneously with the adoption of the amendments to Rules 1309.1 and 1302.

**Response:** The amendment to the rules and the transfer of credits to the downwind districts are two separate and distinct actions although the credit transfer is dependent upon the Board approval of the amendments to Rules 1302 and 1309.1. The suggestion for concurrent approval will be considered by staff, however it is the Governing Board that ultimately determines what and when items are to be placed on their Board meeting agendas. PAR 1309.1 also authorizes the delegation of the authority to the Executive Officer to transfer

the credits, if the Board so desires, but the Board has not delegated this authority.

**Comment:** The due diligence requirement should be eliminated for EGFs in downwind air basins or if not, limited to evaluating offset availability in the downwind air basin, not in the AQMD.

**Response:** The due diligence effort is intended to include a search for offsets of the same air contaminant in the air basin where the project is to be located. It is not intended to require a search for interpollutant or inter-basin offsets. Therefore, the due diligence for an EGF in a downwind air basin is limited to evaluating offset availability in that same air basin. Due diligence is required to ensure the Priority Reserve remains a "bank of last resort".

**Comment:** The 1.2 to 1.0 offset ratio should not apply to credits requested by an EGF in a downwind air basin. The quantity of credits required should be determined by the downwind air district.

**Response:** A provision to subdivision (c) of PAR 1309.1, has been added stating the offset ratio for a project in a downwind air basin is determined by the downwind air district.

**Comment:** Since the AQMD does not receive permit applications for EGFs in downwind air basins, the prioritization for these projects should be based upon the date the Executive Office receives the written request specified in PAR 1309.1 (b)(6)(F).

**Response:** Paragraph (f)(1) of PAR 1309.1 has been amended to reflect that prioritization for projects in downwind air basins is based upon receipt of the written request for credits in subparagraph (b)(6)(F). However, it should be noted that to qualify for access to the Priority Reserve, the applicant must certify to the Executive Officer that a complete application has been filed with the downwind basin district.

**Comment:** Clarify whether the 1,000 tons per year of VOC credits for EGFs in downwind air basins is the maximum amount for the entire life of the program or the annual allocation for each year of the program.

**Response:** The 1,000 tons per year of VOC credits for downwind air basins is the maximum amount for the entire life of the program.

**Comment:** The refund cancellation fee should be limited to a maximum of \$1,000,000 since this amount should be a sufficient deterrent for speculative projects.

**Response:** Although the non-refundable fee provides a disincentive to adversely affecting credit availability to legitimate projects by applying for projects that are not genuine, it also recovers the administrative costs incurred by the AQMD for the refund, including recovering funding for clean air projects approved and funded with mitigation fees. Based upon the magnitude of the proposed projects and the cost of credits the suggested limit amount may not be sufficient to recover a significant portion of the clean air project cost for a typical EGF project. However, a cap of two million dollars (\$2,000,000) should be sufficient and language has been added to reflect a cap of two million dollars (\$2,000,000).

**Comment:** The option of requesting a refund due to cancellation of a project prior to the issuance of the Permit to Construct is of little value since the purchase of Priority Reserve credits generally occurs at the time the Permit to Construct is issued.

**Response:** The applicant purchases the credits at the time the Permit to Construct is to be issued. This language has been removed from the proposal.

**Comment:** The requirement for a project cancellation to be "due to circumstances that the Executive Officer determines is beyond the reasonable control" in order to receive a mitigation fee refund should be deleted since it is vague and may not cover all legitimate reasons for cancellations, such as bankruptcy. The refund discount is a sufficient deterrent to cancellation of a project for anything other than compelling reasons.

**Response:** Since the full costs for clean air projects approved and funded with mitigation fees may not be recovered in the event of a project cancellation it is incumbent upon the Executive Officer to ensure the project is cancelled for compelling reasons. Those reasons are specific to an individual case and a complete list of circumstances and reasons cannot reasonably be included in rule text. There may be circumstances in which a project bankruptcy is beyond the reasonable control of the applicant.

**Comment:** Explain the meaning of the requirement that an EGF comply with all conditions of any Executive Order, expired or not, if it relates to access to the Priority Reserve whether credits are used or not.

**Response:** This is language retained from the current rule that may apply to EGFs that filed applications from 2000 through 2003, when there were Executive Orders in effect that have since expired. Permits to Construct under those orders may include conditions subject to the orders that would remain applicable until the EGF is fully operational and a Permit to Operate is issued. Language has been added to PAR 1309.1 to clarify this provision applies only to complete applications filed from 2000 through 2003.

**Comment:** Non-essential public service biosolids processing facilities should also have access to the Priority Reserve.

**Response:** The proposal has been amended to clarify that all biosolids processing facilities may have access to the Priority Reserve, and the term non-essential public service biosolids processing facility has been removed from the proposal. The proposal now distinguishes between exclusively-publicly owned and publicly operated and non-public facilities; that difference being the non-public facilities are to pay mitigation fees and are subject to the 1.2 to 1.0 offset ratio.

**Comment:** Privately owned biosolids processing facilities should have the same requirements in 1309.1 as public facilities.

**Response:** Just as EGFs and EPRS, including all those that are for profit operations are required to pay mitigation fees for Priority Reserve credits and be subject to a 1.2 to 1.0 offset ratio, so should for profit biosolids processing facilities. This provides a level playing field with other for profit facilities seeking credits from the Priority Reserve as well as those that must seek offsets in the open marketplace.

**Comment:** It should be clarified that non-essential public service biosolids facilities with a potential to emit of less than 4 tons per year do not have to access the priority reserve and should modifications cause an exceedance of that threshold, access to the priority reserve would be granted.

**Response:** No new or modified source, including biosolids processing facilities, with a potential to emit of less than 4 tons per year is required to provide offsets. The term non-essential public service biosolids processing facility has been removed from the rule and replaced with the more descriptive term of non-

public biosolids processing facility. Non-public facilities with a potential to emit greater than 4 tons per year may receive credits from the Priority Reserve provided they meet the requirements in PAR 1309.1, including payment of mitigation fees and a 1.2 to 1.0 offset ratio.

**Comment:** The terms "owner and operator" and "applicant" are used interchangeably.

**Response:** For clarity the proposal has been modified to use the term applicant throughout, except to appropriately distinguish between exclusively-publicly owned and publicly operated and non-public biosolids processing facilities.

**Comment:** Rule 1309.1 establishes a set aside of PM10, CO, and SOx exclusively for essential public services. The set aside should also include VOC and NOx.

**Response:** The set aside of PM10, CO and SOx credits for essential public services was established to ensure that the additional demand for such credits by EGFs would not jeopardize the supply of credits for essential public service projects. However, since in-Basin EGFs and EPRS do not have access to Priority Reserve VOC and NOx credits, they do not adversely impact the supply, of such credits. EGFs in downwind air basins have access only to a specific limited amount of VOC credits. Therefore, a set aside specifically for essential public services for VOC and NOx is not necessary.

**Comment:** Is the CPI the best index to use to track the increase in cost of Priority Reserve Credits.

**Response:** The initial cost of credits is established by a weighed average of previous transactions and is adjusted annually by the CPI. Given the limited number of years of access to the Priority Reserve by EGFs and EPRS, this reflects an equitable pricing structure without the complexity of a strictly cost of previous transaction approach. Non-public biosolids processing facilities pay mitigation fees as well and do not have a term limit on access to the Priority Reserve. Staff will continue to monitor use of the Priority Reserve by these facilities and in the event the term is extended for EGFs and EPRS consider pricing mechanisms that ensure the Priority Reserve remains a "last resort" source of offset credits.

**Comment:** Rule 1309.1 should be amended to clarify how Priority Reserve credits are tracked.

**Response:** Staff is currently developing a credit tracking rule to be included in Regulation XIII. The tracking mechanism for Priority Reserve credits will be addressed by that rule development.

**Comment:** The requirement for providing all offsets available for essential public services should be clarified so that it applies to "internal" offsets. In addition, it should be clarified that "all existing sources" in the requirement for EGFs applies to these sources at the same facility.

**Response:** Language has been added to make these clarifications.

**Comment:** In those instances where the Executive Officer must approve actions or proposals of the applicant, the basis or criteria for the decision should be included.

**Response:** Language has been added to identify the basis for this Executive Officer or Governing Board action.

**Comment:** Facilities should maintain records of all credits obtained from the Priority Reserve.

**Response:** Rule 1309.1 requires facilities to maintain their balance of Priority Reserve credits. In addition, the AQMD maintains records of all Priority Reserve transactions and balances. Additional record keeping is not necessary.

**Comment:** The Executive Officer maintains the balance of PM-10, CO and SOx credits and transfers credits to the Priority Reserve if necessary. The frequency of monitoring and where the credits are transferred from should be clarified.

**Response:** The AQMD maintains a record of all Priority Reserve transactions and balances including the balance of the Priority Reserve. When the Priority Reserve balance for PM-10, CO or SOx falls to less than 500 pounds per day, PAR 1309.1 language allows the Executive Officer to transfer credits to the Priority Reserve from the District's NSR account if credits are available from the District's NSR account.

Comments and the Response to Comments subsequent to the June 28, 2006 Public Workshop

**Comment:** Rule 1309.1 is not needed and the proposed amendments do not adequately address Environmental Justice and actual ERC prices.

**Response:** Southern California is in the midst of another energy crisis. Electricity usage is at an all time high. Electricity is a vital necessity. The proposed rule is needed to facilitate the siting and construction of new energy projects for the benefit of all residents. Environmental Justice issues are addressed on a site specific basis for each project as part of the permit and CEQA analysis. Mitigation fee prices are based on historic costs for ERCs and staff will provide the Board an annual update on ERC prices to ensure consistency.

**Comment:** The SCAQMD should not have a Wobbe Index standard in the rule. The CPUC has authority for setting energy standards and the SCAQMD is preempted.

Response: The AQMD is not establishing a Wobbe Index for all natural gas distributed in the Basin. The proposal establishes a natural gas quality threshold only for projects that elect to use Priority Reserve credits and only applies to natural gas at the point it enters the distribution system. Projects utilizing gas with a Wobbe Index value above the threshold can use credits obtained from the open market. This threshold is critical in ensuring that the imported natural gas is of acceptable quality and that adverse air quality impacts associated with the combustion of poor quality natural gas is prevented. The one project proponent who is interested in this provision and is seeking credits from the Priority Reserve and has already agreed to comply with the proposed threshold.

**Comment:** The current Wobbe Index requirement is acceptable however the proposed language should be amended as follows:

- a) To allow flexibility in case the Wobbe Index threshold changes and to change to point of distribution not import of the natural gas supply as follows (proposed change shown as underlined language): "ENERGY PROJECT OF REGIONAL SIGNIFICANCE (EPRS) is a project that increases the import supply to be used in the District of no less than 100,000 barrels per day of crude oil or 250 million cubic feet per day of natural gas with a Wobbe Index of no more than 1360, or such other higher Wobbe Index as the District may specifically approve in the future, at the point such natural gas is introduced into the natural gas distribution system."
- b) To revise the definition of Wobbe Index currently in the rule as follows (proposed change shown as underlined/strikeout language): "WOBBE

INDEX is the higher heating value of a gas divided by the square root of its specific gravity, and expressed in units of BTU per standard cubic feetfoot."

Response: Staff agrees with the proposal to change the rule text to indicate compliance with the Wobbe Index standard for PR access for natural gas at the point of distribution and not import as follows (change shown as underlined language): "ENERGY PROJECT OF REGIONAL SIGNIFICANCE (EPRS) is a project that increases the import supply to be used in the District of no less than 100,000 barrels per day of crude oil or 250 million cubic feet per day of natural gas with a Wobbe Index of no more than 1360, at the point such natural gas is introduced into the natural gas distribution system." Relative to future modifications of the WOBBE Index, staff will be preparing resolution language directing staff to monitor efforts by the California Public Utilities Commission (CPUC) in developing a WOBBE Index for the state and report back to the Stationary Source Committee with staff recommendations and seek further direction. Staff also agrees with the proposed changes to the WOBBE Index definition and has modified the

**Comment:** PAR 1309.1 should be a bank of last resort. Due diligence provisions should be expanded and a higher cancellation fee should be required. Furthermore, the final cut-off date should be up to the date construction is complete and the Permit to Operate is issued. The applicant should be allowed a full refund for return of excess credits to the Priority Reserve resulting from purchase of credits in the open market during the period after the Priority Reserve credits are purchased and before the Permit to Operate is issued.

definition accordingly.

**Response:** The Priority Reserve is a bank of last resort. The due diligence provisions continue established Board Policy. The penalty provisions for cancellation are sufficiently large to discourage speculation or hedging. To require the due diligence effort to continue after credits are purchased from the Priority Reserve and allow a full refund for excess credits resulting from open market purchases during project construction is not practical since it would require the District to wait potentially several years until construction is complete to fund emission reduction credits with the mitigation fees.

**Comment:** Does "net generator" in the definition of an EGF also include municipalities that provide power to their own customers thereby displacing demand from the state grid system?

**Response:** Yes. It has always been staffs intent that municipalities be included in the definition of EGF, and the proposed rule language has been amended to clarify this.

**Comment:** The mitigation fee should not be tied to the CPI. Rather, it should be recalculated each year as the weighted average of transactions.

Response: The proposed mitigation fee levels reflect sales weighted average prices of credit transactions in the open market over extended periods. The annual CPI adjustments are an attempt in part, to reflect the anticipated credit price increase in the open market. While the proposed pricing mechanism by staff has the benefit of providing a predictable mitigation fee level to the project proponents, which is critical in facilitating financing efforts, staff is cognizant that it may not be adequately reflecting the future market value of the credits. On the other hand, recalculating the mitigation fee every year to reflect the sales weighted average price may also not be a feasible mechanism or reasonable approach, especially if the transaction frequency and volume in a given year is low. Nevertheless, staff will provide the Board with annual updates on open market ERC prices to ensure conformity and seek direction on whether further adjustments to the fees are necessary.

Comment: What is the justification for the current proposed EPRS qualifying threshold? It seems high at the current 100,000 barrels/day of crude and 250 MMSCF/day of natural gas and it is recommended that it be reduced to 50,000 barrels/day of crude and 100 MMSCF/day of natural gas.

**Response:** Only larger EPRS, of the size currently proposed, will have an impact on the energy demand in the basin. As a matter of public policy, staff's position is that the current threshold is needed to focus on the projects that will have a material impact. The proposed thresholds, also reflect the sizes of the projects that staff was informed about by the project proponents to date.

**Comment:** Are public biosolids processing facilities where the public contracts operation to a non-public third party and the ownership, control and decision making authority is retained by the public entity eligible for priority reserve credits as an essential public service?

**Response:** Past and current District practice has been that when the public agency maintains ownership and operational control over a third party contractor the AQMD permit to operate is retained by the public agency. Provided the public agency maintains the level of control over the contractor to retain the

permit to operate the project qualifies for the priority reserve as an essential public service. To further clarify the language in the proposed definition of essential public service has been amended to read "exclusively-publicly owned and publicly operated biosolids processing facilities".

**Comment:** Revise the proposed definitions of Biosolids and Biosolids Processing Facility in PAR 1302 as follows to better define these terms (underlined and strikeout formatting indicates added and deleted text respectively):

"BIOSOLIDS are the nutrient-rich organic material resulting from the physical, chemical, and biological treatment of sewage sludge—which can be safely recycled and applied as fertilizer to sustainably improve and maintain soil and stimulate plant growth."

"BIOSOLIDS PROCESSING FACILITY means an operation that <u>further treats</u> solids generated from wastewater treatment occurring produces biosolids from raw materials generated exclusively in the District."

**Response:** Staff agrees with the proposed changes and has amended the current proposed language accordingly.

**Comment:** Clarify if there is a daily usage threshold for the annual allocation of 1,000 tons per year of VOC credits for EGFs in downwind air basins.

**Response:** There is a daily usage threshold and the rule has been modified to clarify this with the annual allocation of 1,000 tons per year expressed in parenthesis for reference. In addition, staff is changing the units from tons per day to lbs per day for consistency purposes, since emissions elsewhere in the rule are all expressed in pounds per day. Quantities remain unchanged.

#### DRAFT FINDINGS

Before adopting, amending or repealing a rule, the AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference, as defined in Health and Safety Code Section 40727. The draft findings are as follows:

**Necessity** – The AQMD Governing Board has determined that a need exists to amend Rule 1309.1 – Priority Reserve to allow electrical generating facilities, energy projects of regional significance and essential public services access to the Priority Reserve for offsets when they are not available on the open market, and establish equivalency with Federal Clean Air Act requirements for Federal Major sources and comply with state law. Furthermore, the AQMD Governing Board has determined that a need exists to amend Rule 1302 – Definitions to clarify the definition of essential public service and add new definitions.

**Authority** – The AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Sections 40000, 40001, 40440, 42300 (permit system), 40709.6 (inter-basin, inter-district offsets) and 40702 of the California Health and Safety Code.

Clarity – The AQMD Governing Board has determined that Rules 1302 – Definitions and 1309.1 – Priority Reserve, as proposed to be amended, are written or displayed so that their meaning can be easily understood by the persons directly affected.

**Consistency** – The AQMD Governing Board has determined that Rules 1302 – Definitions and 1309.1 – Priority Reserve, as proposed to be amended, are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.

**Non-Duplication** – The AQMD Governing Board has determined that Rules 1302 – Definitions and 1309.1 – Priority Reserve, as proposed to be amended, do not impose the same requirements as any existing state or federal regulation and are necessary and proper to execute the power and duties granted to, and imposed upon, the District.

**Reference** – The AQMD Governing Board, in amending the rule, references the following statutes which the AQMD hereby implements, interprets, or makes specific: Health and Safety Code Sections 42300, 40709.6, 40920.5, and CAA §§ 171, 172 and 182.

#### CONCLUSIONS AND RECOMMENDATIONS

Staff recommends amendment of Rules 1302 and 1309.1 for the reasons stated in this staff report.

# **ATTACHMENT 3**

STAFF REPORT PROPOSED RULE 1315 – FEDERAL NEW SOURCE REVIEW TRACKING SYSTEM, SEPTEMBER 8, 2006

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

# **Staff Report**

Proposed Rule 1315 – Federal New Source Review Tracking System

September 8, 2006

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# ADDENDUM – CEQA COMMENTS AND RESPONSES

#### **EXECUTIVE SUMMARY**

Proposed Rule 1315 (PR 1315) has been developed to formalize AQMD's accounting methodology in tracking debits and credits to its offset budget under its New Source Review (NSR) program. The accounting methodology contained in PR 1315 will be used to annually demonstrate that emissions increases from sources which are not required to provide their own offsets (*i.e.*, sources whose offsets are provided by AQMD) are balanced by credits held in AQMD's offset accounts. PR 1315 applies exclusively to AQMD's offset accounts. Therefore, the accounting methodology and equivalency demonstration requirements of the proposed rule will not impact holders of Emission Reduction Credits.

AQMD's NSR program is defined in and established by Regulation XIII – New Source Review. Most recently in 1996, EPA SIP-approved AQMD's Regulation XIII establishing that AQMD's NSR requirements and the federal NSR requirements are programmatically equivalent<sup>1</sup>. As part of this SIP-approval, EPA required AQMD to track both emission credits and emission increases from major sources not required to provide emissions offsets to make annual showings that the aggregate emissions offsets provided by AQMD for emission increases pursuant to AQMD's NSR program exemptions are equal to (or greater than) the aggregate emissions offsets that would be required pursuant to the federal NSR requirements. Emissions offsets are emission reductions created at one location to compensate and balance emission increases at another, different location. AQMD's NSR program requires that emission increases are offset by emission reduction credits provided by the applicant or by allocations from the priority reserve pursuant to Rule 1309.1 – Priority Reserve or from the offset budget pursuant to Rule 1309.2. – Offset Budget. The federal new source review program does not include the exemptions listed in Rule 1304. Therefore, major sources exempt under Rule 1304 are not exempt from the offset requirements of federal NSR. As a result, AQMD maintains offset accounts from which it provides offsets for federal major sources exempt from AQMD's NSR requirements pursuant to Rule 1304 and for federal major sources which receive offsets from the priority reserve or the offset budget. AQMD tracks all disbursements from these offset accounts, as well as all deposits to them. The results of this tracking are aggregated and reported on an annual basis. These annual reports summarize the disbursements from and deposits to AQMD's offset accounts, as well as the running account balances. They also demonstrate programmatic equivalency between AQMD's NSR offset requirements and federal NSR offset requirements contained in the federal Clean Air Act for such sources. Proposed Rule 1315 – Federal New Source Review Tracking System is intended to formalize AQMD's accounting methodology for its offset accounts and AQMD's equivalency demonstration and reporting procedures.

#### **BACKGROUND**

In general, the Federal Clean Air Act requires that, among other things, emission increases of non-attainment air pollutants from new and modified federal major sources be offset with emissions reductions. The AQMD has implemented an NSR tracking system to demonstrate adequate emission reductions for sources exempt from emission offsets requirements under

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<sup>&</sup>lt;sup>1</sup> Subsequent to that, in June 2006, EPA SIP-approved AQMD's most-recent (post-1996) amendments to Rule 1309.1.

Regulation XIII – New Source Review, which are otherwise subject to offset requirements under the federal NSR program. AQMD staff has prepared annual reports which track credits and debits for each year and present the remaining balances of credits in AQMD's offset accounts. The NSR tracking reports go back to the year 1990, which was the year when major amendments were made to AQMD's Regulation XIII. A key source of credits in the tracking system in the past has been orphan shutdowns of major sources. Other credit sources have been "negative NSR balances" resulting from permit actions prior to 1990, and the "BACT discount" currently required by Regulation XIII when banking emission reduction credits (ERCs).

In 2002 AQMD adopted an Offset Budget rule (Rule 1309.2 – Offset Budget) as part of AQMD's NSR program to address some of the shortage problems with ERCs. As part of the discussions between EPA and AQMD regarding Rule 1309.2, EPA raised some questions related to the credits in AQMD's offset accounts for use in the Offset Budget rule. Among the key issues raised by EPA are the following:

- creditability of pre-1990 emission reductions, particularly availability of existing records associated with such reductions;
- creditability of reductions resulting from the BACT discount of newly-banked ERCs, since the discount is presumably also used to satisfy the federal time of use discount requirement;
- baseline calculation procedures to assure an "actual" baseline;
- surplus adjustment at time of use of credits in the tracking system; and
- consistency of credit use with assumptions in the State Implementation Plan (SIP).

EPA staff requested that these issues be resolved in order for EPA to approve amendments to Regulation XIII as a result of adoption of Rule 1309.2, which establishes an "Offset Budget." EPA staff has also requested that AQMD adopt a rule specifying how the tracking of debits and credits will occur in the future. Therefore, EPA and AQMD staff engaged in a series of discussions to develop a proposed revised NSR Tracking System intended to demonstrate continued equivalency of AQMD's NSR program with federal NSR requirements and to address EPA's above-described concerns. Proposed Rule 1315 – Federal New Source Review Tracking System (PR 1315), as well as certain of the proposed amendments to Rule 1302 – Definitions (PAR1302), represents the result of this process.

# DISCUSSION OF PROPOSED RULE 1315 – FEDERAL NEW SOURCE REVIEW TRACKING SYSTEM

AQMD staff has developed a proposed rule which formalizes AQMD's NSR tracking system and includes several modifications to the procedures used in the existing tracking system. The proposed revised procedures include elimination of all credits for which AQMD no longer retains documentation. AQMD has also included additional classes of credits in the tracking system, namely orphan shutdowns of minor sources and other surplus reductions. As a result of these proposed modifications, and even with the inclusion of the minor source orphan shutdowns and

other surplus reductions, AQMD's previously-reported 2002 offset account balances<sup>2</sup> for all pollutants, except for NOx<sup>3</sup>, will be reduced, depending on the pollutant, by from 37 % to 81 %. Several elements of the proposed revisions to AQMD's tracking system contribute to these reductions, as discussed below, but the single element of the proposal with the greatest contribution is the reevaluation of pre-1990 credits and proposed elimination of all credits for which AQMD no longer retains documentation. As a result of this proposed change, AQMD's pre-1990 credits will be reduced, depending on the pollutant, by from 7 % to 92 %. The specific amounts of reductions for each pollutant for the pre-1990 credit account balances and the 2002 offset account balances are shown in Table 1.

The detailed line-by-line adjusted credit balances that result from the proposed modified procedures are shown in Appendix I: *AQMD's NSR Offset Tracking—Federal Running Balances*. The following is a more detailed description of the proposed changes.

Table 1
Reductions in AQMD's Pre-1990 Offset Account and 2002 Offset Account
Balances Resulting from Implementation of Proposed Rule 1315

	VOC	NOx	SOx	СО	PM10
Reduction in AQMD's Pre-1990 Credit Account Balances	58 %	7 %	56 %	76 %	92 %
Reduction in AQMD's 2002 Offset Account Balances	37 %	-33 %	43 %	68 %	81 %

#### SOURCES OF CREDITS

AQMD has described in its annual status reports on Regulation XIII a 1990 starting balance for offset accounts based on data available in 1990. While portions of pre-1990 credits were used years ago, EPA staff has requested an accounting of the validity of such credits to ensure that such credits were creditable. To that end, EPA staff has raised questions about the availability of records relating to the pre-1990 credits. To address the issues raised by EPA, AQMD staff spent several thousand staff hours reviewing and reevaluating all available data for the pre-1990 credits in its 1990 starting balances. The following is a description of sources of credits in AQMD's tracking system. The pre-1990 timeframe and the 1990 and beyond timeframe are addressed separately due to differing provisions of AQMD rules applicable to generation of credits in these time periods.

<sup>&</sup>lt;sup>2</sup> This was the latest NSR Annual Report utilizing the existing tracking procedures.

<sup>&</sup>lt;sup>3</sup> The 2002 NOx balance increased relative to the previously-reported 2002 balance. This increase is the result of both the fact that reevaluation of the pre-1990 balances had only a minor impact on NOx (7 % reduction compared with 56 % to 92 % reductions for the other four pollutants) and the inclusion of additional sources of credits into the revised tracking system that have always been surplus but previously were not tracked due to the ample supply of credits in AQMD's offset accounts for all five pollutants.

#### Pre-1990 Credits

Pre-1990 Permitting Program

AQMD had a robust stationary source permitting program for both major and minor sources in place well before 1990. Key elements of that program are summarized below:

#### Permit Rules

Since prior to 1976, the year that AQMD adopted its initial NSR rules, virtually any construction or modification of a source has required the operator to obtain a permit to construct from AQMD (Rule 201 – Permit to Construct). The only exceptions to these permit requirements are, and at all times were, specified in AQMD Rule 219 – Equipment not Requiring a Written Permit Pursuant to Regulation II, which exempts certain equipment from permit requirements due to minimal potential to affect air quality. With the exception of the specific exemptions in Rule 219, there has been no exemption from permit requirements for sources emitting even relatively small amounts of air contaminants; that is, *all* sources with potential to emit or control air contaminants, including all federal minor sources have been required to obtain permits when constructed or modified unless specifically exempted by Rule 219.

#### New Source Review Rules

AQMD adopted its initial New Source Review rules in October, 1976 even prior to the adoption of the New Source Review requirements into the federal CAA. Originally included in Rule 213 – Standards for Permits to Construct: Air Quality Impact, the NSR rules were moved into a series of rules in Regulation XIII – New Source Review in 1979. The rules required offsetting of emissions increases that exceeded certain thresholds. The thresholds were decreased over time pursuant to rule amendments. For example, for volatile organic compounds and nitrogen oxides, the offset threshold initially was 250 pounds per day, and was reduced by rule amendments during the 1980's to 150 pounds per day, 75 pounds per day, 30 pounds VOC per day and 40 pounds NOx per day, and finally down to zero, requiring no net increase in emissions, unless specifically exempt from offset requirements pursuant to Regulation XIII.

#### NSR Balance

Prior to 1990, in order to implement its offset requirements, AQMD kept a running "NSR balance" for each facility with permitted sources. The NSR balance included an entry for every increase and every decrease in emissions at the facility that resulted from a permit action. The entries in the NSR balance were based on *maximum allowable* emissions, *i.e.* the maximum amount of emissions that a source could emit given its physical capabilities and permit limitations and rule requirements. However, the NSR balance was initially determined for each piece of equipment which had not previously undergone NSR analysis (*i.e.*, pre-NSR equipment) from an *actual* emissions baseline for that equipment. Any subsequent NSR activity for such equipment was conducted on a potential-to-potential basis. Therefore, a pre-NSR source modified under NSR would be subject to NSR on an actual-to-potential basis (*i.e.*, actual pre-modification emissions to potential post-modification emissions)—a very conservative approach.

Prior to 1990, emissions offsets were required when a permit was sought for construction of a new source, or for modification of an existing source, that would cause the sum of increases and decreases at a facility (*i.e.* the NSR balance) to exceed the pre-1990 offset threshold levels.

NSR balance entries had to be quantifiable and enforceable. Such entries only occurred pursuant to permit applications with sufficient substantiating data to ensure quantifiability, after evaluation by AQMD engineers and review by supervisory staff pursuant to Regulation XIII rules and implementing policies established by the agency, and upon issuance of permits or permit modifications which were enforceable under state law.

AQMD applied substantial resources to implementing these rules. For example, from 1985 through 1989 AQMD's engineering staff which processed permits consisted of between 97 and 175 professional engineers and supervisory and management staff. In sum, at all times including, but not limited to, prior to 1990, AQMD has had a robust air quality permitting system—a system which AQMD believes was qualitatively superior in terms of quantification and reliability to any other NSR permitting system in the nation.

#### Compliance with Federal NSR Requirements

In addition to being reliable, the above-described pre-1990 AQMD NSR rules fully complied with all federal requirements. Indeed, AQMD's NSR rules were more stringent than required by federal law in the following important respects: (1) offset thresholds were lower than required by federal law and a 1.2 to 1.0 offset ratio was used for all sources and all emittents; (2) unlike federal requirements which allowed "bubbling" or netting out of LAER until the 1990 amendments to the Clean Air Act, AQMD's BACT requirement (equivalent to federal LAER) applied to any emissions increase from an individual piece of equipment; *i.e.*, there was no netting out of LAER; (3) offset ratios for SOx, CO, and PM10 were greater than 1 to 1 (*i.e.*, were at 1.2 to 1); (4) AQMD had a zero BACT threshold; and (5) the fact that the NSR balance was initially based upon an actual emissions baseline ensured that any increase in potential emissions that exceeded the actual emissions baseline and resulted in total potential emissions in excess of the offset threshold amount (which, again, was more restrictive than federally required) would be subject to NSR requirements. Additionally, EPA SIP-approved AQMD's Rule 201 as amended January 5, 1990, and AQMD's NSR rules as adopted or amended on the dates identified in Table 2.

Table 2 SIP-Approved Revisions of AQMD's NSR Rules

Rule	AQMD Adoption Date(s)
213	10/8/1976 (Rescinded by AQMD 6/28/1990)
1300	(Rescinded by AQMD 6/28/1990)
1301	12/7/1995
1302	12/7/1995, 6/13/1997
1303	5/10/1996
1304	6/14/1996
1305	4/6/1984 (Rescinded by AQMD 6/28/1990)
1306	6/14/1996
1307	(Rescinded by AQMD 6/28/1990)
1308	10/5/1979 or 3/7/1980 or 4/4/1980 or 7/11/1980 (Rescinded by AQMD 6/28/1990)
1309	12/7/1995
1309.1	12/7/1995, 6/19/2006
1309.2	(Pending SIP Approval)
1310	12/7/1995
1311	10/5/1979 (Rescinded by AQMD 6/28/1990)
1312	(Rescinded by AQMD 6/28/1990)
1313	12/7/1995

#### Negative Balances

By 1990, some facilities had negative NSR balances. These negative balances were the result of equipment shutdowns or process changes since October 1976 which resulted in reductions in emissions from a source. The majority of negative balances resulted from equipment shutdowns. Like all entries in the NSR balance, negative balances only occurred pursuant to permit actions—*i.e.* either modification of an AQMD permit or shutdown of equipment. Negative balances were quantified by AQMD engineers based upon the permitted physical capabilities of the modified or shut down equipment and applicable permit requirements.

#### Existing Pre-1990 Accounting

AQMD's offset accounts were established with starting balances based on pre-1990 emissions reductions. The primary source of these pre-1990 reductions was a portion of facilities' negative NSR balances which were discounted as specified in the 1990 amendments to Regulation XIII (described below). The 1990 Regulation XIII amendments also directed the Executive Officer to recall all existing pre-1990 ERCs which had resulted from shutdowns, discount them by eighty percent, and issue new ERCs at twenty percent of their original values. The eighty percent discount of the pre-1990 shutdown ERCs was deposited into AQMD's offset accounts along with the amounts derived from the discount of pre-1990 negative balances (further explanation of the implementation of the 1990 amendments to Regulation XIII is provided with the discussion of AQMD's proposed revisions to its pre-1990 accounting). All of AQMD's annual status reports prepared to date have included the starting balances from these sources (discount of pre-1990 negative balances and pre-1990 shutdown ERCs); AQMD has not taken credit for any other pre-1990 sources of credits, such as the zero BACT threshold, use of ERCs by minor sources, or the additional ERCs provided by major sources for SOx, CO, and PM10 at a ratio of 1.2 to 1.0 compared to 1.0 to 1.0.

## Proposed Adjustments to Pre-1990 Accounting

AQMD is now proposing to significantly reduce (by more than 60 % overall) its pre-1990 emission credits by eliminating any present or past use of any credits for which AQMD presently has no records and cannot re-verify the validity of such credits and to only utilize the portion of the previously-reported pre-1990 emission reductions which was originally validated in 1990/91 and revalidated in 2004/05 as credits in its tracking system and for which AQMD has all or some records. The emission reductions that underlie those credits occurred between 15 and 29 years ago, and not all records related to them are available today. In many cases, however, summary data based on previous analyses are available. While not all records are available, AQMD at all relevant times prior to and after 1990 had a sufficiently robust permitting program and record validation procedure to provide confidence regarding the validated emission reductions for which AQMD proposes to take pre-1990 credits. This conclusion is supported by the preceding discussion of AQMD's pre-1990 permitting program and the following summary of the 1990 Regulation XIII amendments and their implementation:

# ■ 1990 Regulation XIII Amendments

AQMD substantially modified Regulation XIII in 1990. The offset threshold was dropped to zero, although relatively small emitting facilities (*e.g.* less than 30 pounds per day of VOC or 40 pounds per day of NOx) were eligible to obtain needed credits from a new "Community Bank." Under the 1990 amendments, negative balances were to be "verified by the Executive Officer" and discounted by 80%. The rules specified that "upon validation" the remaining amount was to be issued to the permit holder in the form of an ERC (Rule 1309(a)).

# • Implementation of 1990 Amendments Shortly after adoption of the 1990 amendments to Regulation XIII, AQMD staff drafted a detailed internal guidance document titled "Regulation XIII – New Source Review Guidance Manual" specifying how the amendments would be implemented by AQMD permit processing engineers. The required treatment of negative balances was described in this

document. It specified that negative balances would have to be "verified" in accordance with standard procedures. It also specified that each facility's NSR account would be searched by computer to determine if any "forgivenesses" (*i.e.* negative entries due to prior rule amendments lowering offset thresholds) contributed to the facility's negative balance. The document further provided that NSR balances "shall be recalculated" since these forgivenesses were not "real" emission reductions and therefore did not qualify for an ERC pursuant to Rule 1309(b)(1). The transition document also specified that any negative particulate matter emissions balances would be converted to PM10 by multiplying the particulate matter emissions by an average factor of 0.5. Finally, the document stated that any facility with a negative balance of 500 pounds per day or greater was to have each negative entry "confirmed by reviewing the application file which resulted in the negative NSR entry." The vast majority of negative balances at the time (in excess of 80%) were associated with facilities with negative balances exceeding 500 pounds.

In 1991, AQMD's engineering staff commenced the verification and validation processes described in the transition document. The result of these processes was a substantial reduction in the amount of the negative balances for some pollutants, even prior to the 80% discount. These reductions were the result of (1) addressing the "forgivenesses," (2) determinations that some reductions were required by AQMD rules and thus ineligible for ERCs, and (3) in some cases correction of simple data entry errors. Table 3 presents the 80 % portion of the 1990 negative balances that were deposited in AQMD's offset accounts. The larger amount shown for each pollutant is the amount originally deposited as the result of this process in the early 1990s and which has been previously reported as the 1990 starting balance in the annual NSR status reports and the lower amount is revised based upon recent (2003) re-validation of these numbers by AQMD staff based on records that are still available to address EPA's comments and consistent with EPA policy guidance which allows use of pre-1990 credits that are explicitly included and quantified as growth in the SIP. Such guidance provides that the permitting agency must maintain information including, at a minimum, the name of the source that generated the credit, the source category, credit quantity, specific action that generated the credit, date the credit was generated and "enough other information to determine the creditability. . . . " (Memorandum from John Seitz to David Howekamp August 26, 1994).

Records for pre-1990 emission credits are from 15 to 29 years old. AQMD staff recently conducted an extensive review of the pre-1990 credits and determined that the types of records available today include printouts of NSR data captured in AQMD's permitting database at the time of permit issuance and complete engineering files, which include the materials and documentation submitted by the applicant and AQMD's engineering evaluation.

Table 3
Pre-1990 Credits Deposited in AQMD's Offset Accounts
(Tons per Day)

	VOC	NOx	SOx	CO	PM10	Overall
Previously-Reported Pre-1990 Credits	92.4	25.8	18.4	34.9	34.5	206
Revised Pre-1990 Credits Verified with Records or Validation Procedures	38.46	23.92	8.04	8.45	2.67	81.5
Percent <b>Reduction</b> in Pre-1990 Credits	58 %	7 %	56 %	76 %	92 %	60 %

In the proposed revised NSR Tracking System, AQMD is proposing to only use the revised and re-verified pre-1990 credits (as set forth in Table 3). There are pre-1990 credits which can reasonably be concluded to be creditable based on presently available records. In some cases, such conclusion can be reached because all of the information described in the 1994 Seitz memorandum is currently available. In other cases, the above-described permitting procedures provide "enough other information to determine the creditability. . . ." However, for the majority of the pre-1990 emission reduction credits (more than 60 % overall), the AQMD at present time no longer has the ability to substantiate the validity of the original records based on the available records. Therefore, AQMD is now proposing to significantly reduce its pre-1990 emission reduction credits by eliminating any past or present use of any credits for which AQMD presently can no longer substantiate the validity of such records.

#### Remaining Pre-1990 Credits

AQMD's NSR tracking system has not previously specified the age of credits held in AQMD's offset accounts. However, in response to EPA's comments about the use of pre-1990 credits, staff has completed a "First In/First Out" analysis of these accounts. This analysis shows that significant portions of the pre-1990 VOC and SOx credits remain in AQMD's offset accounts as of July 2002, about one quarter of the pre-1990 NOx credits remained in AQMD's offset accounts as of July 2002, and all of the pre-1990 CO and PM10 credits were depleted from AQMD's offset accounts by 1997<sup>4</sup>. In order to address EPA's comment regarding future use of pre-1990 credits from AQMD's accounts, AQMD proposes to eliminate any unused pre-1990 VOC, NOx, and SOx credits remaining in its offset accounts at the end of the 2004-2005 reporting period and not use any pre-1990 credits in its offset accounts post 2005.

<sup>&</sup>lt;sup>4</sup> All data for 1991 to 1997 is aggregated, so it is uncertain when in this time period the 1990 starting federal account balances for CO, and PM10 were depleted. However, by assuming that these credits were consumed at an approximately constant rate, it is estimated that PM10 was depleted in 1994, and CO was depleted in 1995.

#### 1990 and Beyond Credits

#### Existing 1990 and Beyond Accounting

Due to the high level of available credits in AQMD's offset accounts, AQMD presently only takes credit for some of the qualified credit sources. For example, AQMD's NSR tracking system currently takes credit for orphan shutdowns from major sources only, but not from minor sources. The existing tracking system credits orphan shutdowns to AQMD's offset accounts based upon the allowable permitted level of emissions of the shutdown source. It also does not take credit for surplus reductions of SOx, CO, or PM10 provided as ERCs by major sources as a result of the differences in federal and local offset requirements for these pollutants (local requirement is 1.2 to 1.0 while federal law does not specify an offset ratio in excess of 1.0 to 1.0 for SOx, CO, or PM10) or for surplus reductions resulting from minor sources providing ERCs as emission offsets. The tracking system also does not take credit for AQMD's zero BACT threshold. BACT discounts applied to newly-banked ERCs are credited to AQMD's offset accounts. Offsets are debited from AQMD's offset accounts at 1.2 to 1.0 for all five pollutants when major sources that are not exempt pursuant to the CAA are permitted using Rule 1304 exemptions or the Priority Reserve. AQMD's portion of the California SIP does not include assumptions reflecting the NSR tracking system or commitments to make up any shortfall in AQMD's offset accounts. Additionally, the tracking system does not take credit for surplus reductions resulting from modifications at major sources that do not constitute "major modifications" pursuant to the new NSR Reform Regulations.

# Proposed Adjustments to 1990 and Beyond Accounting

The proposed changes to the sources of credits to and debits from AQMD's offset accounts for the 1990 and beyond time period are summarized below:

#### Pre-1990 Credits

AQMD proposes to **eliminate** any unused pre-1990 credits remaining in its offset accounts at the end of the 2004-2005 reporting period and to not use any pre-1990 credits in its offset accounts post 2005.

#### Minor Source Orphan Shutdowns

Post-1990, the NSR tracking system has only used orphan shutdowns of major sources to fund AQMD's offset accounts. However, shutdowns of permitted *minor* sources also meet the requirements that credits be real, permanent, enforceable, quantifiable, and surplus in the same way as do major source shutdowns. ERCs generated from minor sources are commonly used to fulfill the offset requirements for emission increases at major sources which are not exempt from offset requirements under AQMD's NSR rules. Therefore, although AQMD has not previously used these credits due to the large balances available in its offset accounts, it is appropriate to include emission reductions from minor source orphan shutdowns as credits in AQMD's offset accounts.

AQMD's Rule 201 requires written authorization from the Executive Officer (*i.e.*, a permit to construct) before a person may build, erect, install, alter or replace any equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce or control the issuance of air contaminants. Rule 203 – Permit to Operate similarly prevents

the operation or use of such equipment without a permit issued by the Executive Officer. The only exceptions to these requirements are specifically identified in Rule 219. However, all of the minor sources which AQMD proposes to use as sources of orphan shutdown credits as described above have been through the permitting process. In fact, such minor sources are subject to the same Regulation IV - Prohibitions, Regulation XI - Source Specific Standards, and Regulation XIII rule requirements as are major sources. In some cases the operators of these sources go through the necessary steps to quantify and generate ERCs when they experience real, permanent, enforceable, quantifiable, surplus emission reductions (*e.g.*, equipment or facility shutdown or modification). Such ERCs generated by minor sources are fully valid and eligible for use as major source offsets. Therefore, in cases where the operators do not go through the steps to generate ERCs from their emission reductions, it is appropriate for AQMD to treat these orphan shutdowns in the same manner as it does orphan shutdowns at major sources.

- Major Source Use of SOx, CO, and PM10 ERCs PR 1315 includes credit for the 20 % additional SOx, CO, and PM10 ERCs provided by major sources as emission offsets at a ratio of 1.2 to 1.0 pursuant to Rule 1303 rather 1.0 to 1.0 (federal accounting). The 20 % above a 1.0 to 1.0 offset ratio is creditable because the federal CAA only requires a 1.2 to 1.0 offset ratio for extreme non-attainment pollutants and their precursors; the required offset ratio for SOx, CO, and PM10 pursuant to the CAA and the TSD is "at least 1 to 1" according to EPA.
- Offset Ratio for Exempt Major Sources of SOx, CO, and PM10 PR 1315 changes the offset ratio for major sources of SOx, CO, and PM10 offset from AQMD's offset accounts from 1.2 to 1.0 to 1.0 to 1.0 (federal accounting). This change is consistent with the CAA, which only require a 1.2 to 1.0 offset ratio for extreme nonattainment pollutants and their precursors (not from SOx, CO, or PM10).
- ERCs Provided by Minor Sources to Offset Emission Increases The CAA does not require minor sources to provide offsets for their emission increases. Therefore, the third-party ERCs that these sources provide to offset their increases pursuant to Rule 1303 are creditable to AQMD's offset accounts.
- Surplus Discount at Time of Use Credits in AQMD's offset accounts that resulted from post-1990 orphan shutdowns or orphan reductions and which, based on a first-in/first-out analysis, are not used in the same timeframe they are banked will be subject to a BARCT at the time of use adjustment pursuant to PR 1315. This will be accomplished based on rule control requirements that become effective each year. Specifically, each year all credits in AQMD's offset accounts carried over from the previous year be discounted by the amount of the percentage reduction in overall permitted emissions<sup>5</sup> projected to be achieved as a result of implementation of control requirements that become effective during the year for the pollutant in question. This

<sup>&</sup>lt;sup>5</sup> Permitted emissions data is derived primarily from permitted facilities emitting more than four tons of VOC, NOx, SOx, or PM per year or more than 100 tons of CO per year.

analysis will be performed on an aggregate basis each year for credits carried over from the previous year.

# Actual Emissions Baseline

PR 1315 uses an average discount factor to account for the difference between potential and actual emissions. Since 1997, AQMD has used a twenty percent discount to convert potential emissions to estimated actual emissions for purposes of compliance with state "no net increase" requirements. This procedure has been used with concurrence of the California Air Resources Board. PR 1315 uses the same factor for federal NSR tracking purposes. In light of the methodology used to quantify potential emissions (explained in more detail below), staff's engineering judgment indicates that, on average, a twenty percent reduction from potential emissions is a reasonable estimate of actual emissions. Actual emissions for individual sources will range from the sources' potential emissions down to less than eighty percent of potential emissions, but eighty percent of potential emissions represents an acceptable estimate of aggregate actual emissions. The use of eighty percent of potential emissions as actual emissions is well documented in AQMD's annual status reports regarding Regulation XIII.

Facilities with potential to emit in excess of the Rule 1304 exemption thresholds (4 tons per year for VOC, NOx, SOx, and PM10 and 29 tons per year for CO), provide ERCs to offset their increases in potential emissions so they have a strong incentive to keep their potential emissions in line with actual emissions at times of high production. Smaller facilities with potential to emit below the exemption thresholds may be inclined to request permits based on potential emissions at the exemption threshold levels because the offsets are provided by AQMD at no cost to the facility. However, AQMD engineers perform a thorough evaluation of each permit application prior to recommending issuance of a permit to construct or a permit to operate. These evaluations include a determination of the actual controlled emission rate (based on source test results, VOC content of coatings, sulfur content of fuel, or other potential toxics emissions for example) or expected actual controlled emission rate (based on established emission factors or manufacturers' guarantees, for example). This data is then combined with the maximum anticipated production rate to determine the equipment's potential to emit. Note that the maximum production rate used in these calculations is based on what is reasonably expected for the facility and source in question during periods of high production and is not based on either "24-7" operations (except for those facilities that actually do operate in such a manner) or an artificially highest permissible emission level for each source. In addition, although these sources are not required to provide emission offsets, they are still subject to AQMD's toxics NSR rules, and as such will not artificially raise their potential to emit or permitted emissions. Therefore, actual emissions are not expected to be considerably different than potential emissions and 80 % of potential emissions provides a reasonable estimate of actual emissions. This conclusion is further supported by potential to emit data for facilities at or below the exemption thresholds. Table 4 shows that there are far more facilities with potentials to emit below the exemption thresholds than at the exemption thresholds.

Table 4
Ratio of Numbers of Facilities with Potential to Emit (PTE) Below Exemptions
Thresholds to Numbers of Facilities with PTE at Exemption Thresholds

		Ratio (Below Threshold:		
Pollutant	PTE Range A <sup>1</sup>	PTE Range B <sup>2</sup>	PTE C <sup>3</sup>	At Threshold)
VOC	1,336	1,348	601	4.5:1
NOx	2,021	1,534	363	10:1
SOx	545	180	32	23:1
СО	2,789	330	10	310:1
PM10	1,686	940	188	14:1

<sup>1</sup> PTE Range A is greater than zero but less than 2 tons per year for VOC, NOx, SOx, and PM10 and is greater than zero but less than 15 tons per year for CO.

# Discounting Newly-Banked ERCs to BACT

Rule 1309 – Emission Reduction Credits and Short Term Credits specifies that the amount of emission reductions banked as a new ERC not be "greater than the equipment would have achieved if operating with current Best Available Control Technology (BACT)." No similar requirement exists in the federal CAA. Therefore, the amount of any otherwise qualifying emission reductions not issued as an ERC due to implementation of this provision are surplus. However, EPA has indicated that since AQMD uses the BACT discount at time of generation in lieu of the federally-required BARCT discount at time of use, therefore, AQMD cannot take credit into its offset accounts for the BACT discount of ERCs. In order to address EPA's concerns, AQMD agrees to retroactively remove all credits generated from BACT discount of ERCs from its offset accounts, except such credits which AQMD has demonstrated (or demonstrates in the future) exceed the discount that would be required by approved SIP rules and rules scheduled to be approved by AQMD in the following year's rule cycle. AQMD shall notify EPA and obtain EPA's concurrence when making this alternative discount. Specifically, AQMD has identified 6.67 tons of CO per day of BACT discount of ERC credits from 1991 in AQMD's federal CO offset account which are beyond approved SIP rules and rules scheduled to be approved by AQMD in the following year's rule cycle at the time of use. AQMD will, therefore, retain these offsets (which were used in the early 1990s).

# SIP Inventory and Growth Assumptions

To date, the AQMD has incorporated a sufficient portion of available tracking system credits into the AQMP at the time of plan revision to assure that the growth assumptions in the plan

<sup>&</sup>lt;sup>2</sup> PTE Range B is greater than or equal to two but less than four tons per year for VOC, NOx, SOx, and PM10 and is greater than 15 but less than 29 tons per year for CO.

<sup>&</sup>lt;sup>3</sup> PTE C is four tons per year for VOC, NOx, SOx, and PM10 and is 29 tons per year for CO.

are consistent with NSR credits used. In order to assure that the SIP assumes that all necessary credits are "in the air," AQMD proposes to provide an enforceable commitment to revise the amount of credits assumed to be "in the air" at the time of the next triennial plan revision required by state law while meeting ROP & attainment demonstration.

# Other Potential Credits

PR 1315 does not propose to take any credits for surplus reductions such as application of LAER in excess of federal requirements to any increase in emissions at a major stationary source for non-ozone precursors such as SOx, CO and PM10 or the zero BACT threshold. AQMD understands that when and if it wants to use such credits it will be necessary to hold further discussions with EPA and ARB. AQMD is also not presently proposing to take any credits for not having to deduct emission increases resulting from modifications at major sources that do not constitute major modifications pursuant to the NSR Reform Regulations at this time. However, AQMD would like to be able to use such provisions if a project can be demonstrated to not be subject to NSR since it is not a "federal major modification" under NSR reform. AQMD is also currently investing funds resulting from the mitigation fees provided by electrical generating facilities pursuant to Rule 1309.1 – Priority Reserve in various emission reduction projects. Therefore, AQMD may discuss mechanisms for taking credit for such emission reductions with EPA and ARB in the future.

# Inventory Issues Related to Minor Source Orphan Shutdowns

Emissions from small permitted sources (*i.e.*, less than 4 tpy of any criteria pollutant or 100 tpy of CO) are treated as area sources in the AQMP inventory. Typically, a base year inventory is prepared by projecting historical activity data to future years on the basis of socioeconomic data provided by SCAG. The surrogates used for emission growth projection are documented in Appendix III, Table 2-3 of the 2003 AQMP. The growth factors for source categories are mostly greater than 1 with a few exceptions. When the growth factor is greater than 1, emissions are projected to grow without taking into account any potential NSR constraint that offsets may not be available. By the same token, if the growth factor is less than 1, future emissions are estimated to be lower than the base year emissions.

EPA staff raised an issue that shutdown credits from source categories that are projected to decrease in the AQMP may not be appropriate to be used as offsets, since the AQMP has already reflected such decreases. However, closer examination of the AQMP process and the assumptions made in the Plan reveals that use of shutdown credits from source categories with even negative projected growth does not result in double counting of emissions reductions. The AQMP assumes negative growth in some categories and positive growth in others. Further, the positive growth assumptions include no constraints on growth posed by cost or availability of emission offsets (and all existing ERCs are also assumed to be "in the air" independent of the growth projections). Inherent in these AQMP assumptions is the assumption that emission decreases, including decreases associated with negative growth, result in emission credits that can be used to offset emission increases. Therefore, movement of potential emissions from a negative growth category to a positive growth category via appropriately quantified and discounted credits is entirely consistent with the AQMP and its assumptions. Furthermore, even though AQMD has never experienced actual growth greater than that projected in the AQMP,

AQMD reevaluates the AQMP with each AQMP revision and makes appropriate changes and corrections as a part of this process (and commits to continue to do so consistent with state law). Finally, there is no restriction on the generation of ERCs by sources in categories with negative projected growth or on the use of such ERCs by sources within other categories. The standard for credits in AQMD's offset accounts should not be higher than for privately held credits.

# **Summary**

The NSR tracking system outlined in PR 1315 establishes a very conservative accounting methodology. As indicated earlier, it includes reducing AQMD's previously-reported pre-1990 credits from a 7 % reduction in NOx to a 92 % reduction in PM10 and will change the previously-reported 2002 NSR offset accounts from a 39 % increase in NOx credits to an 81 % reduction in PM10 credits. The overall impact on emission credits resulting from PR 1315 are summarized in Table 5 for both the 1990 starting balances and July 2002 running balances. Table 5 also presents the District offset account balances at the end of the 2002-2003 and 2003-2004 reporting periods as calculated consistent with the proposed revised NSR tracking system procedures (refer to Appendix III for a complete discussion of the 2002-2003 and 2003-2004 reporting periods).

Table 5
Summary of AQMD's Offsets Accounts
(Tons per Day)

	VOC	NOx	SOx	СО	PM10
Previously-Reported 1990 Starting Balance	92.4	25.8	18.4	34.9	34.5
Revised 1990 Starting Balance	38.46	23.92	8.04	8.45	2.67
Reductions in AQMD's Pre-1990 NSR Account Balance	58 %	7 %	56 %	76 %	92 %
Previously-Reported 2002 Running Balance	107.65	21.60	18.76	24.09	41.24
Revised 2002 Running Balance	68.37	28.77	10.72	7.84	7.66
Reductions in AQMD's 2002 NSR Account Balance	36 %	-39 %	43 %	68 %	81 %
2003 Running Balance	73.96	30.25	10.92	9.14	9.29
2004 Running Balance	82.57	29.19	11.24	10.20	10.49

Tables 6 and 7 summarizes the changes between AQMD's existing federal NSR tracking system and the federal NSR tracking system established by PR 1315. These tables summarize the existing and proposed revised NSR tracking system for pre-1990 emission reductions and 1990

and beyond emission reductions. Table 8 and 9 summarize the equivalency determination and the backstop provisions of Proposed Rule 1315.

# Table 6 Summary of Changes between AQMD'S Existing and Proposed Revised NSR Tracking Systems for Equivalency with Federal Requirements:

# **Pre-1990 Federal Emission Reductions**

AQMD's Existing NSR Tracking System	AQMD's Proposed Revised NSR Tracking System
Starting Balance based on data generated in 1990 from facilities' (both major and minor sources) emission reductions recorded as negative NSR balances. This data has been used and previously reported in all annual NSR status reports.	Initial Starting Balance based on data from facilities' (both major and minor sources) emission reductions recorded as negative NSR balances which were originally verified in 1990/91 and re-verified in 2004/05 and all or some records currently exist. This excludes all other data for emission reductions with no present records.
No credit taken for surplus reductions from SOx, CO, and PM10 offsets provided (at 120 %) as ERCs for minor sources.	No Change.
No credit taken for the 20 % additional SOx, CO, and PM10 offsets (ERCs) for major sources provided at a ratio of 1.2 to 1.0 compared to 1.0 to 1.0.	No Change.
No credit taken for emission reductions created from the application of zero BACT threshold <sup>(1)</sup> .	No Change.

<sup>&</sup>quot;Zero BACT threshold" refers to AQMD's requirement that BACT applies to all emission increases (no matter how small) at all sources (no matter how low their potential to emit).

# Table 7 Summary of Changes between AQMD'S Existing and Proposed Revised NSR Tracking Systems for Equivalency with Federal Requirements:

1990 and Beyond Federal Emission Reductions

1990 and Beyond I ederal Emission Reductions				
AQMD's Existing NSR Tracking System	AQMD's Proposed Revised NSR Tracking			
Addib 3 Existing Nort Trucking Cystem	System			
Remaining pre-1990 credits eligible for use	Remaining pre-1990 credits eligible for use			
until depleted.	until the end of 2005; no pre-1990 credits will			
	be used post-2005.			
No credit taken for orphan shutdowns from	Orphan shutdowns include shutdowns of both			
minor sources.	major and minor sources.			
No further discount/adjustment applied to	All orphan shutdowns will be discounted/			
estimate actual emissions.	adjusted to reflect estimated actual emissions.			
No further discount/adjustment for orphan	All orphan shutdowns will be discounted/			
shutdowns due to BARCT at time of use.	adjusted to BARCT at time of use by			
	discounting balances "carried over" from one			
	year to the next.			

# Table 7 (continued)

1990 and Beyond Federal Emission Reductions

1990 and Beyond Federal Emission Reductions				
AQMD's Existing NSR Tracking System	AQMD's Proposed Revised NSR Tracking System			
BACT discount credit portion of newly-issued ERCs eligible for crediting to AQMD's offset accounts (as previously approved by EPA).	No BACT-discount credits from any past or future-issued ERCs will be eligible for crediting to AQMD's offset accounts except those for specific projects for which staff has demonstrated or demonstrates that the BACT discount is beyond approved SIP rules and rules scheduled to be approved by AQMD in the following year's rule cycle at the time of use of the credits.			
VOC and NOx offsets provided by AQMD for federal major sources exempted by AQMD at a ratio of 1.2 to 1.0.	No Change.			
No credit taken for surplus reductions from SOx, CO, and PM10 offsets provided by AQMD for major sources exempted by AQMD at a ratio of 1.2 to 1.0 compared to 1.0 to 1.0.	SOx, CO, and PM10 offsets provided by AQMD for major sources exempted by AQMD at a ratio of 1.0 to 1.0 <sup>(1)</sup> .			
No credit taken for surplus reductions created from offsets (ERCs) provided (at 120 %) by minor sources which are not exempt from offset requirements under AQMD NSR rules ( <i>i.e.</i> , > 4 but < 10 TPY of VOCs and NOx, etc.).	Credit taken for surplus reductions created from offsets (ERCs) provided (at 120 %) by minor sources which are not exempt from offsets requirements under AQMD rules ( <i>i.e.</i> , > 4 but < 10 TPY of VOCs and NOx, etc.).			
No credit taken for surplus reductions created from the 20 % additional SOx, CO, and PM10 offsets (ERCs) provided by major sources at 1.2 to 1.0 ratio compared to 1.0 to 1.0 ratio.	Credit taken for surplus reductions created from the 20 % additional SOx, CO, and PM10 offsets (ERCs) provided by federal major sources at a ratio of 1.2 to 1.0 compared to 1.0 to 1.0 ratio.			
No credit taken for emission reductions created from the application of zero BACT threshold <sup>(1)</sup> .	No Change.			
No credit taken for application of LAER in excess of federal requirements to any increase in emissions at a major stationary source for non-ozone precursors (SOx, CO, and PM10).	No credit taken for application of LAER in excess of federal requirements to any increase in emissions at a major stationary source for non-ozone precursors (SOx, CO, and PM10) at this time. If AQMD decides to pursue use of such credits in the future, further discussions with EPA will be necessary.			
No SIP adjustment for NSR tracking system.	Appropriate assumptions in the SIP to reflect NSR tracking system with commitment to make up any shortfall in next AQMP revision pursuant to state law.			

<sup>&</sup>quot;Zero BACT threshold" refers to AQMD's requirement that BACT applies to all emission increases (no matter how small) at all sources (no matter how low their potential to emit).

### **USE OF CREDITS**

The above-described credits will be used to fund the Offset Budget as adopted by AQMD's Governing Board in Rule 1309.2 in addition to the current use of credits to provide offsets for federal major sources which are exempt from offset requirements under AQMD Regulation XIII (Rule 1304) and to provide Priority Reserve offsets (Rule 1309.1) in order to provide equivalence to federal NSR requirements. As indicated earlier, a list of Regulation XIII provisions for which sources are exempt from offset requirements and AQMD uses its offset accounts to demonstrate equivalency is presented in Appendix II.

# DEMONSTRATIONS OF EQUIVALENCY

PR 1315 directs the Executive Officer to make annual equivalency demonstrations in two steps. In step one, AQMD will make a preliminary determination of equivalency (PDE) within twelve months of the close of each reporting period. Such PDE will be a very conservative determination based on the reporting period's combined debits but will not include the credits from that reporting period. Therefore, the PDE will represent a "worst case" analyses. Provided the PDE demonstrates equivalency, the orphan shutdowns for the reporting period will be reported (and credited) in the subsequent PDE, as illustrated in Figure 1. However, if the PDE does not demonstrate equivalency, AQMD will, as step two, make a final determination of equivalency (FDE), which will include the reporting period's orphan shutdown credits. The FDE will be prepared within six months of the PDE time frame, as illustrated in Figure 2. For example, the PDE for reporting year B (including all debits for years A and B and orphan shutdown credits for year A only) will be completed by the end of reporting year C. Provided this preliminary annual determination for year B demonstrates equivalency, the year B orphan shutdowns will be included in the preliminary annual determination for year C (to be completed

Figure 1
Equivalency Demonstration Timeline
(PDE Demonstrates Equivalency)

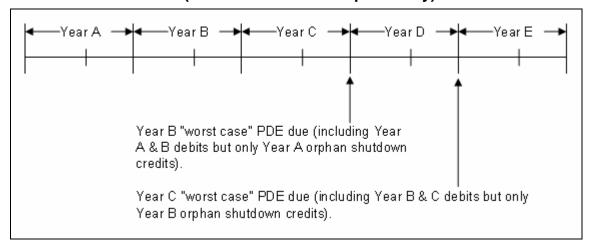
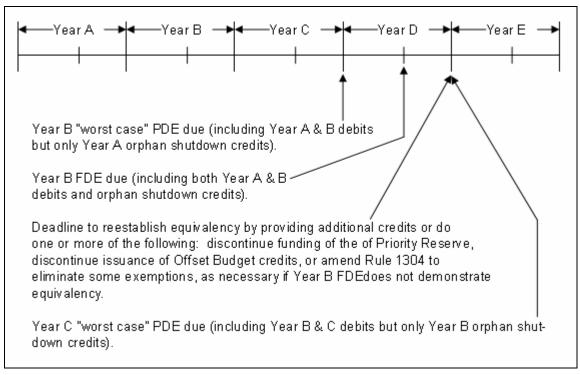


Figure 2
Equivalency Demonstration Timeline
(PDE Does Not Demonstrate Equivalency)



by the end of year D). On the other hand, if the PDE for year B does not demonstrate equivalency, a FDE incorporating year B's orphan shutdown credits will be prepared within six months of the end of year C. In lieu of preparing a PDE and an FDE for a particular reporting period, the Executive Officer may elect to merge the PDE into the FDE provided the FDE includes all of the elements of the PDE which it subsumes and it complies with the completion and reporting requirements of the subsumed PDE. The offset accounting will be conducted in the following order:

- 1. Subtract year B's debits from any remaining pre-1990 credits (1990-2005 timeframe only); then
- 2. Subtract any debits remaining after step 1 from any post-1990 credits remaining from year A; then
- 3a. If there are no remaining debits, discount the post-1990 credits remaining from step 2 as described in the discussion of Surplus Discount at Time of Use. Then add Year B's credits to the discounted post-1990 credits remaining from year A.
- 3b. If there are any remaining debits from step 2 (meaning there are not any post -1990 credits remaining), subtract year B's remaining debits from year B's credits.

PR 1315 specifies that each PDE and FDE will be presented to AQMD's Governing Board in a report from the Executive Officer ("Board Letter") at a public meeting of the AQMD Governing Board, no later than the second regularly-scheduled Governing Board meeting after the conclusion of the applicable twelve-month (PDE) or six-month (FDE) preparation period. The reported determinations of equivalency will include the balances in AQMD's offset accounts, as

well as summaries of credit and debit data by category such as Priority Reserve, Community Bank, and Rule 1304 exemptions.

In addition, pursuant to PR 1315, AQMD will evaluate the future availability of credits in AQMD's offset accounts by conducting a two-year projection of debits, credits, and account balances in conjunction with (but not as a part of) each determination of equivalency. This analysis will include projected debits, credits, and offset account balances for each of the two years following the subject reporting period. The projections for each pollutant will be based on the average of the previous five years' credits and debits for that pollutant. The Executive Officer will not make quarterly allocations to the Priority Reserve for any pollutant during a time when AQMD's offset account for that pollutant is not projected to remain positive<sup>6</sup>. The purpose of the projections is to prospectively determine if sufficient offsets will remain in AQMD's offset accounts to continue funding the Priority Reserve; they are not intended to demonstrate equivalency retrospectively.

# TRACKING AND BACKSTOP

PR 1315 includes backstop provisions to be triggered in the event that an FDE does not demonstrate equivalency. In such an event, the backstop provisions would require AQMD to take one or more of the following actions to the extent necessary to correct the credit shortfall:

- Provide additional credits within six months of the FDE; such credits could be derived through AQMD purchase of credits, through AQMD funding of emission reduction projects using quantification protocols or rules approved by EPA on a case-by case or programmatic basis, application of LAER in excess of federal requirements<sup>7</sup>, or other approved sources of credits.
- Suspend issuance of both Priority Reserve and Offset Budget credits (Rules 1309.1 and 1309.2) within 90 days and not resume the issuance of any such credits until AQMD has demonstrated that equivalency has been reestablished. Equivalency may be reestablished through procurement of additional offsets and/or appropriate program modifications.

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<sup>&</sup>lt;sup>6</sup> Offsets provided from the Priority Reserve are debited from AQMD's offset accounts for the period during which the permit was issued (*i.e.*, for the timeframe they are used) whereas the quarterly allocations made to the Priority Reserve pursuant to Rule 1309.1(a) do not constitute debits from AQMD's offset accounts. The newly-proposed future years' projections of balances in AQMD's offset accounts will include projected use of Priority Reserve and Offset Budget offsets as well as sources exempted pursuant to Rule 1304. A significant portion of the quarterly allocations to the Priority Reserve are used by sources which are not subject to federal offset requirements (*i.e.*, federal minor sources) and, therefore, do not need to be debited from AQMD's offset accounts for purposes demonstrating equivalency with federal NSR requirements.

<sup>&</sup>lt;sup>7</sup> Precise quantification of all surplus credits generated through application of LAER in excess of federal requirements may be extremely resource intensive. Therefore, AQMD may, with EPA approval, demonstrate that such application of LAER has generated at least enough surplus reductions to make up for the shortfall using very conservative assumptions to estimate the surplus reductions.

 Amend Rules 1309.1, 1309.2 and/or 1304 to restrict access by specific sources to the Priority Reserve and/or to eliminate certain categories of offset exemptions, respectively, to be identified during the rulemaking process.

Table 8
Summary of Changes between AQMD'S Existing and Proposed Revised Determinations of Equivalency

AQMD's Existing NSR Offset Account and Tracking System	AQMD's Proposed Revised NSR Offset Account and Tracking System
No specific deadlines and equivalency demonstration typically completed within two years of the close of the reporting period <sup>8</sup> .	Preliminary (worst case) determination of equivalency (PDE) completed within one year of the close of the reporting period. If PDE does not verify equivalency, final determination of equivalency (FDE) completed within six months of the PDE timeframe.
No projections of future equivalency done with annual equivalency demonstrations	All annual demonstrations of equivalency (FDE or PDE) will be accompanied by projected NSR offset account balances for the two years following the subject reporting period. These projections are for the purpose of prospectively determining if sufficient offsets remain in AQMD's accounts to continue providing Priority Reserve offsets and will not constitute a part of the determinations of equivalency.
Funding of Priority Reserve conducted quarterly on an automatic basis without utilization of any projections of AQMD's offset account balances.	Executive Officer to exercise the option to discontinue funding the Priority Reserve upon finding that AQMD's offset accounts do not include sufficient credits. This will include discontinuation of funding when offset account balance projections in the most recent determination of equivalency do not indicate equivalency for the current reporting period.

<sup>&</sup>lt;sup>8</sup> However, AQMD did not previously prepare an equivalency demonstration for the period post 2002 until now (see Appendix C) in order to address EPA's concerns and, as a result, utilize the proposed revised NSR Tracking System procedures.

Table 9
Summary of Changes between AQMD'S Existing and Proposed Revised Backstop Measures:

AQMD's Existing NSR Offset Account and Tracking System	AQMD's Proposed Revised NSR Offset Account and Tracking System
No backstop measures identified for addressing potential shortfalls in AQMD's offset accounts.	Several backstop provisions identified in the proposed tracking rule, one or more to be implemented as needed to return AQMD's NSR program to equivalency with federal NSR requirements and correct any credit shortfall:  Provide additional credits within six months of the FDE; to be derived from AQMD purchase of credits, AQMD funding of emission reduction projects using quantification protocols or rules approved by EPA, application of LAER in excess of federal requirements, or other EPA-approved credit sources.  Suspend issuance of both Priority Reserve and Offset Budget credits within 90 days, not to be resumed until equivalency has been reestablished.  Amend Rules 1309.1, 1309.2, and/or 1304 to eliminate access to the Priority Reserve by certain sources and/or certain offset exemptions, respectively.

# **CEQA ANALYSIS**

Pursuant to the California Environmental Quality Act (CEQA), the SCAQMD is the Lead Agency and has reviewed the proposed rule pursuant to CEQA Guidelines §15002 (k)(1). There are no reasonably foreseeable environmental impacts resulting from PR1315. Therefore, PR1315 is not a "project" under CEQA. Furthermore, because the proposed rule specifies New Source Review reporting procedures and, therefore, is administrative in nature, it can be seen with certainty that there is no possibility that the proposed rule in question has the potential to have a significant adverse effect on the environment. Thus, even if the proposed rule is determined to be a "project" under CEQA, it is exempt from CEQA pursuant to CEQA Guidelines §15061(b)(3) - Review for Exemption. A Notice of Exemption will be prepared pursuant to CEQA Guidelines §15062 - Notice of Exemption. The Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties immediately following the adoption of the proposed rule. Please refer to the Addendum to the Staff Report for CEQA comments and responses.

# SOCIO-ECONOMIC IMPACTS

PR 1315 will formalize the accounting procedures the AQMD will use in demonstrating the equivalency of Regulation XIII to the federal new source review requirements for sources which do not provide their own offsets yet are subject to the federal NSR requirements for offsets. It will require annual equivalency demonstrations within twelve months after the close of each reporting period. Additionally, a two-year projection of credits and debits will be made along with each equivalency demonstration following each reporting period. The AQMD will be able to stop funding of the Priority Reserve and will be required to implement backstop measures if there is a shortfall in its offset accounts.

The elimination of banked credits from BACT discount, annual discount of newly-generated credits, and significant adjustments (overall 60 % reductions) to the pre-1990 balances and the removal of pre-1990 balances after calendar year 2005 will reduce the number of credits in the AQMD's offset accounts. On the other hand, minor source shutdowns will increase credits available. However, it is too speculative to project the amounts of all these categories for future years until the close of each period.

The AQMD's offset accounts have not experienced a shortfall historically. The backstop provisions would forestall future shortfalls. The impact of backstop provisions cannot be evaluated at this time due to their speculative nature. However, the suspension of offset funding within 90 days of a demonstrated FDE shortfall, if applicable, might delay the start of new sources since currently there is no stipulation as to funding suspension.

# **AQMP AND LEGAL MANDATES**

The California Health and Safety Code requires the AQMD to adopt an Air Quality Management Plan (AQMP) to meet state and federal ambient air quality standards in the South Coast Air Basin. In addition, the California Health and Safety Code requires that the AQMD adopt rules and regulations that carry out the objectives of the AQMP. While Proposed Rule 1315 is not a control measure included in the AQMP, its requirements are consistent with the AQMP objectives.

# RESOURCE IMPACTS

Due to the volume and complexity of analysis required, it is estimated that implementation of PR 1315 will require one full time employee and \$150,000 in programming costs for enhancements to AQMD's New Source Review computer program.

# PR 1315 AND STAFF REPORT COMMENTS AND RESPONSES

**Comment:** A chart showing the impacts of the proposed amendments to Rule 1309.1 scheduled

for a Public Hearing in September 2006 might be included in the staff report and

discussed.

**Response:** The impacts of the proposed amendments to Rule 1309.1 are thoroughly addressed

in the staff report for that proposed rulemaking. For example, the preliminary draft staff report for the proposed amendments to Rule 1302 and Rule 1309.1 includes a table summarizing estimated demand for Priority Reserve offsets for each of the

categories of sources which are proposed to be given short-term access to the Priority Reserve (*i.e.*, in-basin electrical generating facilities (EGF), energy projects of regional significance, out-of-basin EGFs, and biosolids projects). The totals presented in that table are reproduced below for reference (in pounds per day), along with the fractions of AQMD's 2004 offset account balances and of AQMD's projected 2006 offset account balances the estimated demand represents for each pollutant (as a percent):

	VOC	NOx	SOx	СО	PM10
Pre-2010 Total	6,404	41	1,479	8,827	3,825
Post-2010 Total	491	22		113	22
Fraction of 2004 Balance	4.2 %	0.11 %	6.6 %	44 %	18 %
Fraction of 2006 Balance*	4.9 %	0.12 %	16 %	40 %	15 %

<sup>2006</sup> balances are projected, refer to Appendix III.

Please refer to the staff report for Proposed Rule 1302 and Proposed Rule 1309.1 for a complete discussion of the impact of these proposed amendments.

**Comment:** It is still unclear if AQMD intends to require CO credits of sources given the

pending attainment demonstration.

**Response:** CO offsets will be required until such time as US EPA re-designates this region as

an attainment area..

**Comment:** At the end of the first paragraph in the Executive Summary, it would be appropriate

to add some comforting words to the effect that private holders of ERC certificates

are not impacted by this action.

**Response:** A statement to this effect has been added to the Executive Summary.

**Comment:** Please clarify that surplus adjustments at time of use at PR 1315(b)(4), which we

understand will be done on a programmatic basis, will be allowed the opportunity

for public comment and Board approval.

**Response:** The short timelines which apply to the completion of each demonstration of

equivalency (one year for each PDE and an additional six months for each FDE) make a public comment period and Governing Board approval of the surplus adjustments infeasible prior to completion of each demonstration. However, these discounts will be included in the reports to the Governing Board prepared for each demonstration of equivalency. These reports, including the surplus at time of use adjustments, will be subject to public comment and Governing Board review and

approval. Therefore, public comment and Governing Board review and approval

prior to completion of each demonstration of equivalency is unnecessary and would be redundant.

Comment: It is unclear why PR 1315(b)(2) and PR 1315(b)(3)(A)(iv) discuss offset ratios for

extreme non-attainment air contaminants and their precursors when we are currently

designated as Severe-17.

**Response:** The federally-required offset ratio for extreme non-attainment air contaminants and

their precursors is 1.2:1.0. The proposed rule language was written to be consistent with federal requirements. This language eliminates the need to amend this rule if AQMD's attainment status changes in the future. The appropriate offset ratios will be used in each demonstration of equivalency based on the attainment status(es) that

pertain to the subject reporting period for each air contaminant.

**Comment:** At PR 1315(b)(3)(A)(i) and (ii), we cannot find definitions of the terms "orphan

shutdowns" and "orphan reductions" within the text of the proposed rule or the text

of Proposed Amended Rule 1302.

**Response:** Definitions of "orphan shutdown" and "orphan reduction" are now included in

subdivision (b) of PR 1315.

**Comment:** At PR 1315(b)(3)(A)(iii), will the major source threshold be considered to be 25

TPY for VOC and NOx?

**Response:** The major source thresholds (the potential to emit thresholds below which a facility

is a minor source and at or above which a facility is a major source) are contained in Rule 1302. Therefore, the thresholds which apply at any point in time are those which are contained in the most-recently SIP-approved version of Rule 1302 at that time. Currently, those thresholds for VOC and NOx are ten tons per year in the South Coast Air Basin, 25 tons per year in SCAQMD's portion of the Salton Sea Air Basin, and 100 tons per year in SCAQMD's portion of the Mojave Desert air

Basin.

**Comment:** At, PR 1315(b)(3)(A)(v), the "Community Bank" term doesn't actually exist in

name within the New Source Review rules.

**Response:** The term "Community Bank" refers to the meaning established and used by the

June 28, 1990 and May 3, 1991 revisions of Rule 1309.1.

Comment: At PR 1315(b)(3)(B)(i), how can a paragraph be pursuant to itself [(b)(3)(B)]?

**Response:** The references in PR 1315b)(3)(i) have been corrected.

**Comment:** Subparagraphs (b)(3)(D), (b)(3)(E), and (b)(3)(F) do not seem to exist.

**Response:** The references in PR 1315b)(3)(ii) have been corrected.

**Comment:** In the backstop provisions at PR 1315(e), why wouldn't the Offset Budget

procedures in Rule 1309.2 be discontinued first?

**Response:** As proposed to be amended, Rule 1309.1 gives the Executive Officer the authority

to discontinue funding of the Priority Reserve without Governing Board action. Rule 1309.2 does not give the Executive Officer similar authority regarding the Offset Budget. Therefore, discontinuation of funding of the Offset Budget would

require Governing Board action and could not be complete in as short a timeframe as could discontinuation of funding the Priority Reserve. Note that the authority to discontinue funding of the Priority Reserve does not suggest that the Executive Officer has the authority to discontinue use of the Priority Reserve so long as it continues to have positive account balances.

### **DRAFT FINDINGS**

Before adopting, amending or repealing a rule, the AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference, as defined in Health and Safety Code Section 40727. The draft findings are as follows:

Necessity – The AQMD Governing Board has determined that a need exists to adopt Proposed Rule 1315 – Federal New Source Review Tracking System, to formalize AQMD's accounting methodology for tracking changes to its internal NSR offset accounts for the purpose of demonstrating programmatic equivalency between AQMD's NSR program and federal NSR requirements.

**Authority** – The AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Sections 40000, 40702, 40725 through 40728, and 42300 *et seq.* of the California Health and Safety Code.

Clarity – The AQMD Governing Board has determined that Proposed Rule 1315 – Federal New Source Review Tracking System, as proposed to be adopted is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

Consistency – The AQMD Governing Board has determined that Proposed Rule 1315 – Federal New Source Review Tracking System, as proposed to be adopted is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.

**Non-Duplication** – The AQMD Governing Board has determined that Proposed Rule 1315 – Federal New Source Review Tracking System, as proposed to be adopted, does not impose the same requirements as any existing state or federal regulation and is necessary and proper to execute the power and duties granted to, and imposed upon, the AQMD.

**Reference** – The AQMD Governing Board, in adopting this rule, references the following statutes which the AQMD hereby implements, interprets, or makes specific: Health and Safety Code Sections 42300 et seq. and Clean Air Act Sections 172, 173, and 182(e).

# CONCLUSIONS AND RECOMMENDATIONS

The comparative analysis referred to in Health and Safety Code Section 40727.2 is not required because PR 1315 does not establish a new emissions limit, make an existing limit more stringent, or impose new or more stringent monitoring, reporting, or recordkeeping requirements on a source. Similarly, the proposed rule will not impose any requirements on regulated sources so the incremental cost effectiveness analysis identified in Health and Safety Code Section 40920.6 (which only applies to adoption of rules or regulations which require use of best available retrofit control technology or which are feasible measures pursuant to Health and Safety Code Section 40914) is not required.

Staff recommends adoption of Proposed Rule 1315 for the reasons stated in this staff report.

# APPENDIX I AQMD'S NSR OFFSET TRACKING—UPDATED RUNNING BALANCES

As explained in detail in the main body of this staff report, AQMD staff has devoted considerable resources to re-evaluating and revalidating its offset accounts:

- The pre-1990 credits were adjusted and reduced to reflect the quantities for which AQMD retains full or partial records documenting the credit amounts;
- The post-1990 credits were updated to reflect the eligibility and quantification requirements contained in PR 1315;
- The post-1990 debits were updated to reflect the eligibility and quantification requirements contained in PR 1315; and
- The accounting procedures were updated to reflect the procedures contained in PR 1315.

These updates are all discussed in greater detail in the main body of this staff report. Their combined impacts are significant changes in both the pre-1990 and post-1990 balances in AQMD's offset accounts (overall 60 % and 42 % reductions, respectively, in the pre-1990 and 2002 offset account balances). These changes are summarized in Tables 1, 3, and 5. Table I-1 provides much greater line-by-line detail regarding the offset accounts over time. Each source of credit or debit in Table I is cross referenced to the PR 1315 rule section in each line immediately after the description of such credit or debit.

# APPENDIX II: LIST OF SOURCES EXEMPT FROM OFFSET REQUIREMENTS AND PROVISIONS COVERED BY EQUIVALENCY SHOWING

The following sources are exempt from AQMD's NSR offset requirements or their offsets from AQMD's Priority Reserve or Offset Budget but are not exempt from federal NSR offset requirements. Therefore, use of these exemptions or use of Priority Reserve or Offset Budget offsets by major sources constitutes debits from AQMD's offset accounts and is reflected in AQMD's demonstrations of equivalency. Items listed below in italics are not currently in AQMD's NSR program but are proposed for inclusion into Rule 1309.1 – Priority Reserve by the Governing Board at a Public Hearing currently scheduled for September 8, 2006.

# **Rule 1304 - Exemptions:**

- (1) Replacements need to be tracked because of PTE Baseline in 1304 (a)(1) Emissions will generally be lower due to BACT. AQMD will demonstrate through representative analysis that emission reductions from BACT exceed those needed for offsets pursuant to actual potential analysis.
- (2) Relocations need to be tracked because of PTE baseline in 1304(c)(1) Emissions will generally be lower due to BACT.
- (3) Abrasive Blasting Equipment
- (4) Air Pollution Control Strategies
- (5) Emergency Equipment
- (6) Portable Internal Combustion Engines
- (7) Methyl Bromide Fumigation
- (8) Replacement of Ozone Depleting Compounds
- (9) Portable Equipment
- (10) Regulatory Compliance
- (11) Regulatory Compliance for Essential Public Services
- (12) Facility Exemption (VOC, NOx, SOx, or PM10 PTE less than 4 tons per year or CO PTE less than 29 tons per year)
- (13) Resource Recovery
- (14) Electric Utility Boilers Alt Energy

# Rule 1309.1 - Priority Reserve

The Priority Reserve, which is funded from AQMD's offset accounts, provides a source of emission offsets for certain priority categories of sources. Except as noted below, these offsets

are provided by AQMD at no cost to the operator. The various categories of sources eligible to access the Priority Reserve are summarized below:

(1) Innovative Technology

Use of a technology that results in significantly lower emissions than would the use of BACT.

(2) Research Operations

Projects with the purpose of "investigation, [experimentation], or research to advance the state of knowledge or the state-of-the-art." Limited to at most two years.

(3) Essential Public Service

Sources in the following categories located at facilities where all sources operate at or below BARCT levels

- Publicly-owned sewage facilities;
- Prisons;
- Police facilities;
- Fire fighting facilities;
- Schools:
- Hospitals;
- Construction/operation of landfill gas control or processing facility;
- Water delivery operations;
- Public transit; and
- Public Biosolids processing facilities.
- (4) Electrical Generating Facilities (2000 through 2003)

Specified categories of facilities that generate electricity; meet BARCT for all sources; applicant has conducted a due diligence effort to acquire ERCs on the open market; applicant has applied for California Energy Commission certification or AQMD permit to construct during calendar years 2000, 2001, 2002, or 2003; and applicant pays the following fee for each pound of Priority Reserve offsets obtained (VOC and NOx not available for these sources):

- \$25,000 per pound PM10 and day;
- \$8,900 per pound SOx per day; and
- \$12,000 per pound CO per day.
- (5) Electrical Generating Facilities, Energy Projects of Regional Significance, Electrical Generating Facilities in Downwind Air Basins, and Non-Public Biosolids Processing Facilities (2005 though 2008)

Electrical generating facilities, energy projects of regional significance, electrical generating facilities in downwind air basins, and non-public biosolids processing facilities that meet BARCT for all sources; applicant has conducted a due diligence effort to acquire ERCs on the open market; applicant has applied for California Energy Commission certification or AQMD permit to construct during calendar years 2005

2006, 2007, or 2008; and applicant pays the following fee for each pound of Priority Reserve offsets obtained (VOC and NOx not available for these sources):

- *\$50,417 per pound PM10 and day;*
- \$15,083 per pound SOx per day; and
- \$12,000 per pound CO per day;
- (6) Electrical Generating Facilities in Downwind Air Basins, (2005 though 2008) Electrical generating facilities in downwind air basins, that meet BARCT for all sources; applicant has conducted a due diligence effort to acquire ERCs on the open market; applicant has applied for California Energy Commission certification or AQMD permit to construct during calendar years 2005 2006, 2007, or 2008; and applicant pays the following fee for each pound of Priority Reserve offsets obtained (NOx, SOx, CO, and PM10 not available for these sources):
  - \$1,410 per pound VOC per day.

# Rule 1309.2 - Offset Budget

Sources that are not exempt from offset requirements pursuant to Rule 1304 and are not eligible to obtain offsets from the Priority Reserve may obtain offsets from the Offset Budget provided they meet certain criteria<sup>1</sup>:

- (1) All sources the applicant owns or operates comply with BARCT;
- (2) Applicant has conducted a due diligence effort to acquire ERCs on the open market;
- (3) Applicant pays the appropriate mitigation fee (based on pollutant and pounds of offsets obtained) specified in Regulation III Fees; and
- (4) Applicant publishes a notice (prepared by AQMD's Executive Officer) in a newspaper of general circulation in each of the four counties in AQMD, sends copies of the notice to the Administrator of EPA's Region IX and the Executive Officer of the California Air Resources Board, and responds to all public comments received within 30 days of publication.

<sup>&</sup>lt;sup>1</sup> The Offset Budget has not been implemented because it has not been approved into the State Implementation Plan, as required by the express terms of Rule 1309.2 before it can be implemented.

# APPENDIX III PROVISIONAL FINAL DETERMINATIONS OF EQUIVALENCY FOR 2002-2003 AND 2003-2004

# **SYNOPSIS**

This report presents *provisional* final determinations of equivalency for August 2002 through July 2003 and August 2003 through July 2004. As such, it provides provisional information regarding the status of Regulation XIII – New Source Review (NSR) in meeting federal NSR requirements and shows that AQMD's NSR program was in compliance with applicable federal requirements during the periods covered. Staff has not finalized all elements of the data analysis, but has taken a conservative approach so does not expect large changes in the results (small increases in some ending offset account balances may occur). A second report will be prepared presenting the final determinations upon completion of staff's data analysis. This second report will satisfy the reporting requirements of subdivision (b) of Rule 1310 – Analysis and Reporting and of subdivisions (c) and (d) of Proposed Rule 1315 – Federal New Source Review Tracking System (PR 1315).

### **SUMMARY**

AQMD's NSR Rules and Regulations are designed to support efforts to attain and maintain compliance with the federal and state air quality standards and to ensure that emissions increases from new and modified sources do not interfere with such efforts, while maintaining economic growth in the South Coast region. Regulation XIII - New Source Review regulates emissions increases and accounts for all emission changes (both increases and decreases) from the permitting of new, modified, and relocated sources within AQMD with the exception of NOx and SOx sources subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM)<sup>1</sup>.

The annual reports on the status of Regulation XIII (final determinations of equivalency, or FDE) cover NSR activities for twelve-month periods and the last report submitted to the Board on April 2, 2004 covered the period from August 2001 through July 2002 for both federal and state NSR requirements. The provisional FDEs presented in this report cover the periods August 2002 through July 2003 and August 2003 through July 2004 and demonstrate compliance with federal NSR requirements by establishing aggregate equivalence with federal offset requirements for sources which obtain their offsets from AQMD. A separate FDE report presenting the FDEs for these two time periods will be prepared by AQMD staff and submitted to the Governing Board. This FDE will also address equivalency between AQMD's NSR program and state NSR requirements.

While the RECLAIM program is different than command and control rules for NOx and SOx and it provides greater regulatory flexibility to businesses, its NSR requirements, as specified in Rule 2005, are designed to comply with the governing principles of NSR contained in the federal Clean Air Act (CAA) and the California State Health and Safety Codes.

The provisional results of the analysis for the August 2002 through July 2003 and August 2003 through July 2004 timeframes are summarized below in Tables III-1 and III-2, respectively. Additionally, projected credits, debits, and balances for the August 2004 through December 2005 and the January 2006 through December 2006 timeframes are presented in Table III-3. These results demonstrate that there were, and it is projected that there will be, adequate offsets available to mitigate all emission increases during these reporting periods. This report, therefore, demonstrates that AQMD's NSR program continues to meet federal offset requirements and is equivalent to those requirements on an aggregate basis<sup>2</sup>.

Table III-1

August 2002 through July 2003 Starting Balances,
Net Activity, and Ending Balances for AQMD's Offset Accounts

DESCRIPTION	VOC	NOx	SOx	СО	PM10
Starting Balance* (ton/day)	68.37	28.77	10.72	7.84	7.66
Total Credits** (lb/day)	13,515	5,908	545	7,149	3,480
Total Debits** (lb/day)	-1,424	-2,066	-135	-4,544	-211
Sum of Credits/Debits** (lb/day)	12,091	3,842	410	2,605	3,269
Sum of Credits/Debits** (ton/day)	6.05	1.92	0.20	1.30	1.63
Surplus Adjustment*** (ton/day)	-0.46	-0.44	0.00	0.00	0.00
Ending Balance**** (ton/day)	73.96	30.25	10.92	9.14	9.29

<sup>\*</sup> The revised 2002 running balances as shown in Table 5 of the staff report and Table I-1 of Appendix I.

\*\*\*\* "Ending Balance" equals the "Starting Balance" plus the sum of credits and debits and plus any surplus adjustments.

<sup>\*\*</sup> Refer to PR 1315(b) and the staff report to which this report is attached for an explanation of the sources of credits and debits. Credits are shown as positive and Debits as negative, while sum of Credits/Debits and Net Activity are shown as positive or negative, as appropriate.

<sup>\*\*\*</sup> Surplus at the time of use discount pursuant to PR 1315(b)(4).

<sup>&</sup>lt;sup>2</sup> AQMD's NSR program is deemed to be equivalent to federal offset requirements because AQMD's ending offset account balances remained positive, indicating there were adequate offsets during this period.

Table III-2
August 2003 through July 2004 Net Activity, Starting Balances, and Ending Balances for AQMD's Offset Accounts

DESCRIPTION	voc	NOx	SOx	СО	PM10
Starting Balance* (ton/day)	73.96	30.25	10.92	9.14	9.29
Total Credits** (lb/day)	18,795	3,912	1,833	5,634	2,639
Total Debits** (lb/day)	-539	-1,610	-3	-3,521	-245
Sum of Credits/Debits** (Ib/day)	18,256	2,302	1,830	2,113	2,394
Sum of Credits/Debits** (ton/day)	9.13	1.15	0.92	1.06	1.20
Surplus Adjustment*** (ton/day)	-0.52	-2.21	-0.59	0.00	0.00
Ending Balance**** (ton/day)	82.57	29.19	11.24	10.20	10.49

<sup>\*</sup> Same as "Ending Balance" from Table III-1

<sup>\*\*</sup> Refer to PR 1315(b) and the staff report to which this report is attached for an explanation of the sources of credits and debits. Credits are shown as positive and Debits as negative, while sum of Credits/Debits are shown as positive or negative, as appropriate.

<sup>\*\*\*</sup> Surplus at the time of use discount pursuant to PR 1315(b)(4).

<sup>\*\*\*\* &</sup>quot;Ending Balance" equals the "Starting Balance" plus the sum of credits and debits and plus any surplus adjustment.

Table III-3
Projected Credits, Debits, and Balances for August 2004 through December 2005 and January 2006 through December 2006 (Tons per Day)

DESCRIPTION	voc	NOx	SOx	СО	PM10
8/2004 Starting Balance*	82.57	29.19	11.24	10.20	10.49
8/2004-12/2005 Credits**	7.58	2.79	0.67	2.88	1.89
8/2004-12/2005 Debits**	-1.04	-1.11	-0.02	-2.36	-0.43
8/2004-12/2005 Surplus Adjustment	-1.82	-0.97	-0.19	0.00	0.00
12/2005 Ending Balance**	87.29	29.90	11.70	10.72	11.95
Removal of Unused Initial Balances**		-3.85	-7.40	0.00	0.00
1/2006 Starting Balance**	66.40	26.05	4.30	10.72	11.95
1/2006-12/2006 Credits**	5.35	1.97	0.47	2.03	1.34
1/2006-12/2006 Debits**	-0.74	-0.78	-0.01	-1.67	-0.30
1/2006-12/2006 Surplus Adjustment	-1.31	-0.76	-0.13	0.00	0.00
12/2006 Ending Balance**	69.70	26.48	4.63	11.08	12.99

<sup>\*</sup> Same as "Ending Balance" in Table III-2.

### **BACKGROUND**

AQMD originally adopted its NSR program in 1976. U.S. EPA approved AQMD's NSR program into California's State Implementation Plan initially on January 21, 1981 (46FR5965) and again on December 4, 1996 (61FR64291). The original program has evolved into the current version of the Regulation XIII rules in response to federal and state legal requirements and the changing needs of the local environment and economy. The most recent amendments to the NSR rules were adopted on December 6, 2002 to facilitate and provide additional options for credit generation. The most notable changes in those amendments are summarized below:

# • Short Term Credits (STC)

Rules 1303 – Requirements and 1309 – Emission Reduction Credits and Short Term Credits now provide for the generation and use of short term offsets for stationary sources. These credits can be generated by stationary sources (Emission Reduction Credits or ERCs), mobile sources (MSERCs), and area sources (ASERCs).

# • Extended ERC Filing Deadline

Rule 1309 – Emission Reduction Credits and Short Term Credits' deadline to apply to bank an ERC was extended from 90 days after to 180 days after the emission reduction occurring.

<sup>\*\*</sup> Projected pursuant to PR 1315(d).

# • Offset Budget

Rule 1309.2 – Offset Budget creates a "bank of last resort" to provide offsets for sources that are unable to otherwise obtain needed offsets.

Also in April and November 2001, AQMD amended Rule 1309.1 to allow electric generating facilities (EGFs) to be able to access the Priority Reserve to purchase emission credits. The amendments to Rule 1309.1 were approved by EPA into the SIP on June 19, 2006. EPA has not yet taken SIP action on the amendments to Rules 1303 and 1309 or the adoption of Rule 1309.2. EPA has indicated that AQMD's adoption of an emission tracking rule (such as PR 1315) is necessary before Rule 1309.2 can be approved into the SIP.

AQMD's NSR program is designed, amongst other things, to, at a minimum, offset emission increases in a manner equivalent to federal statutory NSR requirements. To this end, AQMD's NSR program implements the federal statutory requirements for NSR and ensures that construction and operation of new and modified sources does not interfere with progress towards attainment of the National and State Ambient Air Quality Standards. AQMD's computerized emission tracking system is utilized to demonstrate equivalence with federal offset requirements on an aggregate basis. Specific NSR requirements of federal law are presented below.

#### Federal Law

Federal law requires the use of Lowest Achievable Emission Rate (LAER) and offsets for new, modified, and relocated major stationary sources<sup>3</sup>. Effective November 15, 1992, the federal Clean Air Act (CAA) requires a 1.5-to-1 external offset ratio for major stationary sources located in an extreme ozone non-attainment area. For this reporting period<sup>4</sup>, the South Coast Air Basin (SOCAB) is one of only two areas in the nation that has been designated as extreme ozone non-attainment. An extreme ozone non-attainment area may qualify for a 1.2-to-1 offset ratio if it requires implementation of federal Best Available Control Technology (BACT), as defined in CAA Section 169(3) for prevention of Significant Deterioration of Air Quality on all major sources [CAA Section 182(e)(1)]. The federal definition of BACT is equivalent to state Best Available Retrofit Control Technology (BARCT), which AQMD implements through its Regulation XI – Source Specific Standards and other AQMD rules and regulations. AQMD meets this criterion and uses a 1.2-to-1 offset ratio. In addition, AQMD not only requires the 1.2-

The October 20, 2000 amendments to Rule 1302 – Definitions changed the "major stationary source" thresholds applicable to AQMD's jurisdiction. The applicable thresholds during the time period covered by this report were as summarized below:

Pollutant	SOCAB	SSAB	MDAB
VOC	10 tons per vear	25 tons per vear	100 tons per vear
NOx	10 tons per year	25 tons per year	100 tons per year
SOx	100 tons per year	100 tons per year	100 tons per year
PM10	70 tons per year	70 tons per year	100 tons per year
СО	50 tons per year	100 tons per year	100 tons per year

<sup>&</sup>lt;sup>4</sup> The South Coast Air Basin is currently classified by EPA in severe 17 ozone non-attainment status. However, this basin was designated as extreme non-attainment during the reporting periods covered by this demonstration of equivalence.

to-1 offset ratio for all federal sources, but also requires the same offset ratio for non-federal sources<sup>5</sup>.

Based on their classification, the SOCAB and Salton Sea Air Basin (SSAB) must comply with the requirements for extreme and severe non-attainment areas, respectively, for ozone precursors (i.e., VOC and NOx). Both the SOCAB and the SSAB must at this time comply with the requirements for serious non-attainment areas for PM10 and its precursors (i.e., VOC, NOx, and SOx). For CO, the SOCAB must comply with the requirements for serious non-attainment areas; however SSAB is considered attainment for CO. SOCAB had one federal CO exceedance in 2002 and has not had any since that time. AQMD has requested EPA to re-designate SOCAB as attainment with federal CO standards and is waiting for EPA's action on that request. Both SOCAB and SSAB are considered attainment for SO<sub>2</sub> and NO<sub>2</sub>, however SOx and NOx are precursors to pollutants for which both SOCAB and SSAB are designated as non-attainment. The Mojave Desert Air Basin (MDAB) is currently unclassified for all pollutants. The various attainment statuses for the VOC, NOx, SOx, PM10, and CO in the three air basins for this reporting period result in the major source thresholds presented by pollutant and air basin in footnote 3 on the previous page. This report demonstrates compliance with the federal NSR requirements.

### OVERVIEW OF ANALYSIS METHODOLOGY

The two major elements of federal NSR requirements are LAER and emission offsetting. AQMD's BACT requirements are at least as stringent as federal LAER for major sources. Furthermore, the NSR emission offset requirements that AQMD implements through its permitting process ensure that sources provide emission reduction credits (ERCs) to offset their emission increases in compliance with federal requirements. As a result, these sources each comply with federal offset requirements by providing their own ERCs. However, certain sources are exempt from AQMD's offset requirements pursuant to Rule 1304 or qualify for offsets from AQMD's Community Bank (applications received between October 1, 1990 and February 1, 1996 only) or Priority Reserve, both pursuant to Rule 1309.1. AQMD has determined that providing offset exemptions and the Priority Reserve (as well as the previously-administered Community Bank) is important to the NSR program and the local economy while encouraging installation of control equipment. Therefore, AQMD has assumed the responsibility of providing the necessary offsets for exempt sources, the Priority Reserve, and the Community Bank. This report examines credits to and debits from AQMD's emission offset accounts and demonstrates programmatic equivalence on an aggregate basis with federal emission offset requirements for the sources exempt from providing offsets and the sources that receive offsets from the Priority Reserve or the Community Bank.

# AQMD's Offset Accounts

For the purposes of this report, debit and credit accounting for AQMD's offset accounts was conducted pursuant to the procedures delineated in PR 1315 and described in the staff report to

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<sup>&</sup>lt;sup>5</sup> Non-federal sources that do not meet any of the exemption criteria of Rule 1304 and that do not qualify to obtain offsets from the Priority Reserve are also required by AQMD to provide offsets (i.e., ERCs) at a ratio of 1.2-to-1.

<sup>&</sup>lt;sup>6</sup> SOx is a precursor to PM10 and NOx is a precursor to both PM10 and ozone.

which this is attached. Each of the five pollutants subject to offset requirements (VOC, NOx, SOx, CO, and PM10) has its own offset account. AQMD's NSR program is considered to provide equivalent or greater offsets of emissions as required by federal requirements for each subject pollutant provided the balance of credits left in AQMD's offset account for each pollutant remains positive, indicating that there were adequate offsets available.

# **Debit Accounting**

On the other hand, AQMD also tracks all emission increases that are offset through the Priority Reserve or the Community Bank, as well as all increases that are exempt from offset requirements pursuant to Rule 1304 – Exemptions. These increases are all debited from AQMD's offset accounts when they occur at major sources. AQMD uses an offset ratio of 1.2-to-1.0 for extreme non-attainment pollutants (currently ozone and ozone precursors) and uses 1.0-to-1.0 for all other non-attainment pollutants (non-ozone precursors) at this time to offset any such increases. That is, at this time 1.2 pounds are deducted from AQMD's offset accounts for each pound of maximum allowable permitted potential to emit VOC or NOx increase at a federal source 1.0 pound for each pound of maximum allowable permitted potential to emit SOx, CO, or PM10 at a federal source. Refer to the PR 1315 staff report for a more complete description of debit accounting.

# Credit Accounting

When emissions from a permitted source are permanently reduced (e.g., installation of control equipment, removal of the source) and the emission reduction is not required by rule or law and is not called for by an AQMP control measure that has been assigned a target implementation date<sup>7</sup>, the permit holder may apply for ERCs for the pollutants reduced. If the permit holder for the source generating the emission reduction had previously received offsets from AQMD or has a "positive balance" (i.e., pre-1990 net emission increase), the quantity of AQMD credits used or the amount of the positive balance is subtracted from the reduction and "paid back" to AQMD's accounts prior to issuance of an ERC pursuant to Rule 1306. In other cases, permit holders do not always submit applications to claim ERCs for their equipment shutdowns or other eligible emission reductions. These unclaimed reductions are referred to as "orphan shutdowns" or "surplus reductions" and are credited to AQMD's offset accounts. ERCs provided as offsets by major sources in excess of the applicable federally-required offset ratio and all ERCs provided as offsets by minor sources are also credited to AQMD's offset accounts. Refer to the PR 1315 staff report for a more complete description of credit accounting.

# PROVISIONAL DEMONSTRATIONS OF EQUIVALENCE WITH FEDERAL OFFSET REQUIREMENTS

Table III-4 presents the total emission increases debited from AQMD's offset accounts from August 2002 through July 2003. Credits to AQMD's offset accounts during the same period are summarized in Table III-5. Finally, the sum of debit and credit activity for the federal accounts is displayed in Table III-6. Similarly, Tables III-7, III-8, and III-9 summarize the debits, credits,

<sup>&</sup>lt;sup>7</sup> Refer to Rule 1309(b) for a complete explanation of eligibility requirements.

and net activity, respectively, for August 2003 through July 2004. Refer to PR 1315 and the staff report to which this report is attached for an explanation of the sources of credits and debits.

**Table III-4**Debits from AQMD's Offset Accounts (August 2002 through July 2003)

DISTRICT OFFSETS USED	VOC	NOx	SOx	СО	PM10
Priority Reserve* (lb/day)	383	867	135	2,249	159
Community Bank (lb/day)	0	14	0	0	0
Rule 1304 Exemptions (lb/day)	804	841	0	2,295	52
Sum Total of AQMD Offsets (lb/day)	1,187	1,722	135	4,544	211
120% Offset Ratio (lb/day)	237	344	N/A	N/A	N/A
Total Debit to AQMD Account (lb/day)	1,424	2,066	135	4,544	211
Total Debit to AQMD Account (ton/day)	0.71	1.03	0.07	2.27	0.10

<sup>\*</sup> Includes electrical generating facilities and other sources accessing the Priority Reserve.

**Table III-5**Credits to AQMD's Offset Accounts
(August 2002 through July 2003)

CREDITS RECEIVED*	VOC	NOx	SOx	СО	PM10
Major Source Orphan Credits (lb/day)	4,619	4,289	58	3,995	2,879
Minor Source Orphan Credits (lb/day)	11,955	2,998	549	4,690	1,253
Total Orphan Credits (lb/day)	16,574	7,287	607	8,685	4,132
Adjustment to Actual Emissions* (lb/day)	-3,315	-1,457	-121	-1,737	-826
Discount of ERCs** (lb/day)	31	0	38	15	30
Creditable Minor Source ERC Use (lb/day)	225	78	21	147	139
Creditable Major Source ERC Use (lb/day)	0	0	0	39	5
Total Credit to AQMD Account (lb/day)	13,515	5,908	545	7,149	3,480
Total Credit to AQMD Account (ton/day)	6.76	2.95	0.27	3.57	1.74

<sup>\*</sup> Adjustment of orphan shutdown and orphan reduction offset credits deposited in AQMD offset accounts to correct from potential emissions to actual emissions pursuant to PR 1315(b)(3)(B)(i).

<sup>\*\* &</sup>quot;Payback" of NSR balance, Community Bank and Priority Reserve allocations, and offset exemptions pursuant to PR 1315(b)(3)(v) and Rule 1306(c).

Table III-6
Sum of Credits/Debits Activity in AQMD's Offset Accounts
(August 2002 through July 2003)

	voc	NOx	SOx	СО	PM10
Total Debits* (lb/day)	-1,424	-2,066	-135	-4,544	-211
Total Credits* (lb/day)	13,515	5,908	545	7,149	3,480
Sum of Debits(-)/Credits(+)* (lb/day)	12,091	3,842	410	2,605	3,269
Sum of Debits(-)/Credits(+)* (ton/day)	6.05	1.92	0.20	1.30	1.63

Debits are shown as negative and Credits as positive, while their sum is shown as negative or positive, as appropriate.

**Table III-7**Debits from AQMD's Offset Accounts (August 2003 through July 2004)

DISTRICT OFFSETS USED	VOC	NOx	SOx	СО	PM10
Priority Reserve* (lb/day)	99	517	0	919	0
Community Bank (lb/day)	0	0	0	0	0
Rule 1304 Exemptions (lb/day)	350	825	3	2602	245
Sum Total of AQMD Offsets (lb/day)	449	1,342	3	3,521	245
120% Offset Ratio (lb/day)	90	268	N/A	N/A	N/A
Total Debit to AQMD Account (lb/day)	539	1,610	3	3,521	245
Total Debit to AQMD Account (ton/day)	0.27	0.80	0.00	1.76	0.12

<sup>\*</sup> Includes electrical generating facilities and other sources accessing the Priority Reserve.

**Table III-8**Credits to AQMD's Offset Accounts
(August 2003 through July 2004)

CREDITS RECEIVED*	VOC	NOx	SOx	СО	PM10
Major Source Orphan Credits (lb/day)	6,355	841	7	3,749	467
Minor Source Orphan Credits (lb/day)	16,850	3,953	2,259	3,060	2,653
Total Orphan Credits (lb/day)	23,205	4,794	2,266	6,809	3,120
Adjustment to Actual Emissions* (lb/day)	-4,641	-959	-453	-1,362	-624
Discount of ERCs** (lb/day)	7	0	0	0	0
Creditable Minor Source ERC Use (lb/day)	224	77	20	148	139
Creditable Major Source ERC Use (lb/day)	0	0	0	39	4
Total Credit to AQMD Account (lb/day)	18,795	3,912	1,833	5,634	2,639
Total Credit to AQMD Account (ton/day)	9.40	1.96	0.92	2.82	1.32

<sup>\*</sup> Adjustment of orphan shutdown and orphan reduction offset credits deposited in AQMD offset accounts to correct from potential emissions to actual emissions pursuant to PR 1315(b)(3)(B)(i).

Table III-9
Sum of Credits/Debits Activity in AQMD's Offset Accounts
(August 2003 through July 2004)

	voc	NOx	SOx	СО	PM10
Total Debits* (lb/day)	-539	-1,610	-3	-3,521	-245
Total Credits* (lb/day)	18,795	3,912	1,833	5,634	2,639
Sum of Debits(-)/Credits(+)* (lb/day)	18,256	2,302	1,830	2,113	2,394
Sum of Debits(-)/Credits(+)* (ton/day)	9.13	1.15	0.92	1.06	1.20

<sup>\*</sup> Debits are shown as negative and Credits as positive, while their sum is shown as negative or positive, as appropriate.

The sum of credits and debits activity from this analysis (the sum may be positive or negative) is added to the starting offset account balance for each pollutant to calculate the offset account ending balance which is then used to determine compliance with federal NSR requirements. Refer to Table III-1 for a summary of starting and ending account balances for the August 2002 through July 2003 reporting period and Table III-2 for the August 2003 through July 2004 reporting period.

<sup>\*\* &</sup>quot;Payback" of NSR balance, Community Bank and Priority Reserve allocations, and offset exemptions pursuant to PR 1315(b)(3)(v) and Rule 1306(c).

# ELECTRICAL GENERATING FACILITY ACCESS TO PRIORITY RESERVE

The April 2001 amendments to Rule 1303 – Requirements and Rule 1309.1 – Priority Reserve provide EGFs with access to PM10 offsets from the Priority Reserve<sup>8</sup>. Subsequently, the November 2001 and May 2002 amendments to Rule 1309.1 expanded EGF access to Priority Reserve offsets to include SOx and CO. Table III-10 summarizes the Priority Reserve offsets provided to EGFs during the August 2002 through July 2003 reporting period and Table III-11 summarizes it for the August 2003 through July 2004 reporting period. These priority reserve debits are included in (not in addition to) the debits summarized in Tables III-4, and III-7.

Table III-10
EGF Access to Priority Reserve Offsets
(August 2002 through July 2003)

	PM10	SOx	СО
Priority Reserve Offsets Used (lb/day)	514	0	0
Priority Reserve Offsets Used (ton/day)	0.26	0	0

Table III-11
EGF Access to Priority Reserve Offsets
(August 2003 through July 2004)

	PM10	SOx	СО
Priority Reserve Offsets Used (lb/day)	15	0	0
Priority Reserve Offsets Used (ton/day)	0.01	0	0

# **CONCLUSIONS**

The analysis presented in this report demonstrates that AQMD's NSR program provides equivalent offsets to those required by federal NSR requirements and is at least equivalent to the federal requirements on an aggregate basis. This conclusion is based on the fact that the ending offset account balances for both of the reporting periods covered by this report (August 2002 through July 2003 and August 2003 through July 2004), as shown in Tables III-1 and III-2, respectively, remained positive for all pollutants. The majority of sources subject to AQMD's permitting program are not major stationary sources and, therefore, are not subject to federal offset requirements. The sums of credits to and debits from AQMD's offset accounts during the August 2002 through July 2003 and August 2003 through July 2004 reporting periods were positive for all pollutants in both years. However, the NOx offset account experienced a net decrease for the August 2003 through July 2004 reporting period of 1.06 tons per day. This net decrease occurred because the amount of the NOx surplus at the time of use discount pursuant to PR 1315(b)(4) for this reporting period (-2.16 tons per day) was larger than the increase due to the sum of credits and debits (1.11 tons per day) for the reporting period.

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<sup>&</sup>lt;sup>8</sup> Refer to Rule 1309.1(a)(4) for eligibility requirements.

Staff will continue to track credits to and debits from AQMD's offset accounts and will provide annual reports and equivalency demonstrations to the Board consistent with PR 1315 to ensure that AQMD's NSR program continues to operate in compliance with federal NSR requirements.

# **ADDENDUM**

# CEQA COMMENTS AND RESPONSES

This section provides a summary of comments received in two letters to AQMD, both dated August 15, 2006, one from a group of environmental organizations<sup>18</sup> and the other from Coalition For a Safe Environment regarding the Draft Environmental Assessment for Proposed Amendments to Rule 1309.1 and Preparation of Notice of Exemption for Proposed Rule 1315 along with the AQMD's responses to such comments. The summary of comments and AQMD's responses listed in this addendum include comments from the August 15, 2006 letters that relate to Proposed Rule 1315.

# **Comments by the Group of Environmental Organizations**

Comment #1: (Page 5, Section II-B)

Proposed Rule 1315 has potential significant environmental impacts. Proposed Rule 1315 will govern availability of credits and significantly

alters existing credits in internal accounts.

Response Proposed Rule (PR)1315 is intended to merely memorialize and formalize

the accounting procedures used by AQMD for federal NSR offset tracking. The AQMD has been maintaining a tracking system for federal NSR offsets for several years, and the purpose of PR 1315 is not to govern availability of credits, but to incorporate the federal NSR offsets accounting procedures into a rule. EPA has requested AQMD to incorporate the accounting procedures into a rule to more formalize the tracking system. In addition to formalizing the federal NSR offsets tracking, PR 1315 makes the NSR offsets program more stringent by providing backstop measures, as requested by EPA, in case there are any

shortfalls in AQMD's federal NSR offset accounts. However, the occurrence of any shortfall is speculative, as AQMD has never experienced such an event. Therefore, PR 1315 clearly does not have any

significant adverse environmental impacts.

Proposed Rule 1315 does not, directly or indirectly, result in any adverse effect on the environment. It does not in itself result in any more credits becoming available for use by projects, which may themselves have an effect on the environment. Access to credits is provided through other District rules, such as 1309.1 (Priority Reserve), and 1304 (exemptions).

 $^{18}$  The group of environmental organizations includes:

California Communities Against Toxics

California Environmental Rights Alliance

California Safe Schools

Center for Community Action and Environmental Justice

Coalition for Clean Air

Coalition for a Safe Environment

Communities for a Better Environment

Del Amo Action Committee

Natural Resources Defense Council

Sierra Club-Harbor Division Task Force

Society for Positive Action

PR 1315 may actually provide a benefit to the environment, although that effect is not foreseeable because it is unknown how many credits will be used and because the District has never experienced a shortfall in credits, so a future shortfall is not foreseeable. Under the system in effect before the adoption of Rule 1315, sources may access credits through Rules 1309.1 and 1304 without regard to whether the District will be able to show equivalency with federal requirements, i.e., without regard to whether there are credits "in the bank." Under Rule 1309.2, credits may not be accessed until EPA approves the rule into the SIP. In contrast, under Rule 1315, backstop provisions, the District will each year project whether credits will be available for future use, and if not, cease funding the Priority Reserve. If the final determination of equivalency does not demonstrate equivalency, the AQMD must implement backstop measures to return to equivalency. Therefore, PR 1315 may provide a beneficial effect on the environment by assuring that credits are available in the bank before a source is permitted, thus assuring that increases in emissions resulting from such sources are fully offset. Thus, it can be seen with certainty that there will be no adverse environmental impacts from PR 1315.

In addition, PR 1315 is not even a "project" under CEQA because the CEQA definition requires that a "project" may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. Pub. Res. C. §21065. The comment asserts that PR 1315 will govern availability of credits. The comment does not explain how this may result in an adverse effect on the environment. And as discussed above, Rule 1315 results in a brake on the availability of credits, not an increase. But even if the comment were correct, PR 1315 would not result in an adverse effect on the environment. According to a leading treatise, "Agency action that merely establishes its ability to take a later action that will affect the environment but does not commit the agency to a definite course of action is not a project subject to CEQA." 1 Kosta & Zischke, Practice Under the California Environmental Quality Act, §4.20 (p. 171). In Citizens to Enforce CEQA v. City of Rohnert Park (131 Cal. App. 4th 1594 (2005), the court explained that where a city's Memorandum of Understanding with an Indian Tribe established a source of funds for future development of a casino, but did not obligate the City to undertake development, the MOU was not a "project." Similarly, where a school district established a community facilities district to raise funds for school development, this was not a "project." Kaufman & Broad South Bay, Inc. v. Morgan Hill Unified School Dist. (1992) 9 Cal. App. 4<sup>th</sup> 464. Even if PR 1315 may increase the number of credits that will be available in the future, this is analogous to the financing mechanisms discussed in the above cases, and is not a "project" under CEQA because any future impacts are not

"reasonably foreseeable." It is not foreseeable whether PR 1315 will make these credits available. Also, the District does not have any way of knowing what projects, if any, will use any such future credits. CEQA will be performed by the lead agency at the time the projects are given development permits. CEQA law is clear that although environmental analysis must be performed as early as feasible to allow environmental considerations to influence the project, it must be "late enough to provide meaningful information for environmental assessment." Stand Tall on Principles v Shasta Union High School District, 235 Cal. App. 3d 772 (1991). In that case, selecting a "preferred" site for a new high school was not "approval" of a "project" under CEQA. In this case, any attempt to analyze environmental impacts of future projects would be speculation, which CEQA does not require. CEQA Guidelines, §15145. Therefore, PR 1315 is not a "project" under CEQA, and it can be seen with certainty that it will not result in significant adverse impacts.

### Comment #2:

# (Page 5, Section II-B-1)

By implementing modifications to Rule 1315 offset credit accounting, AQMD would reduce state regulations in relation to federal regulations and cause backsliding to, and in some cases, past federal standards.

# Response

As indicated earlier, PR 1315 is merely formalizing the AQMD's federal NSR offset tracking system into a rule as per EPA's request. AQMD is not modifying its existing rules or regulations and PR 1315 is strictly for federal NSR offset tracking, as a result, AQMD is not reducing any state regulations. In addition, California Air Resources Board (CARB) has reviewed PR 1315 and has not raised any issues in relation to reducing any state regulations. Therefore, there is no backsliding.

The commenter refers to §193 of the Clean Air Act (42 U.S.C. §7515), the General Savings Clause. This provision only limits modifying control requirements in effect prior to the 1990 CAA Amendments. PR 1315 does not modify any control requirements in effect prior to the 1990 Amendments. Indeed, it does not modify any control requirements at all, since until PR 1315 is adopted, there are no rules governing the NSR equivalency showing.

# Comment #3:

# (Pages 5 and 6, Section II-B-1)

Proposed Rule 1315 makes minor source orphan shut-downs a source of ERCs, which is less stringent than current EPA regulations and violates federal law.

### Response

Use of emission credits resulting from minor source orphan shutdowns is neither less stringent than current EPA regulations nor a violation of federal law. Orphan shutdowns have always been creditable to AQMD's

offset accounts; AQMD has not quantified minor source orphan shutdowns historically because the balances in the AQMD's offset accounts were sufficient for foreseeable needs so it was not necessary for staff to devote the resources to quantify and account for this source of credits. Furthermore, minor sources do (and always have) generate ERCs pursuant to AQMD Rule 1309. These ERCs generated by minor sources can be and are used by major sources as emissions offsets pursuant to AQMD Rule 1303. EPA has approved Rules 1303 and 1309 into the SIP in 1996, and has also agreed that minor source orphan shutdowns are creditable and has not considered this to be contrary to any EPA regulations. Furthermore, the statement "the CAA's state authority retention clause...grants state power to make federal standards more stringent, but not less stringent" is not correct, as states have no authority to affect federal standards. While it is true that 42U.S.C § 7416 precludes a state from adopting or enforcing emission standards less stringent that those set forth under §§ 7411 or 7412, neither of those sections apply to emission credits.

### Comment #4:

(Page 6, Section II-B-1)

Proposed Rule 1315 produces more state credits for the same reduction and would violate the federal surplus requirements.

Response

The purpose of PR 1315 is in fact to identify offsets that are surplus to federal NSR requirements. PR 1315 does not affect state offsets which are separately accounted for state NSR purposes. In evaluating the federal NSR offset tracking system, EPA has agreed that the only credits used by AQMD are those that are surplus to federal NSR requirements.

The commenter does not explain how PR 1315 would violate the federal "surplus" requirement. All the credits allowed under PR 1315 have been carefully reviewed to assure that they are surplus to federal requirements.

# Comment #5:

(Page 6, Section II-B-2)

Rule 1315 retroactively increases the amount of ERCs available and is prohibited because it is not contemporaneous.

Response

Retroactive adjustments to AQMD's offset account tracking and accounting have no impact on the contemporaneousness of the offsets in AQMD's offset accounts. The notion of emissions credits being contemporaneous with the increases they are used to offset refers to the timing of the emission reductions underlying the credits and the timing of the emission increases that are being offset; it does not refer to the timing of the accounting. That is, the emission reduction satisfies the contemporaneous test if it exists on or before the time of the emission increase. AQMD only uses credits after such reductions have taken place.

All the credits referred to in PR 1315 are in existence – i.e., the emission reductions had occurred – at the time they are used, and therefore are contemporaneous with the emissions increase.

Comment #6:

(Page 6, Section II-B-2)

A reduction is not creditable where the decrease in emissions has already been assumed under prior permitting rules. AQMD has previously relied on offset ratios for certain facilities, so is double counting ERCs by reinstating a credit that has already been used.

Response

For federal accounting purposes only, AQMD is taking the difference of AQMD's NSR offset ratio of 1.2 to 1.0 and the required federal offset ratio of 1.0 to 1.0 as a credit when an ERC is used at a major source for SOx, CO or PM10. The additional 0.2 portion is not "relied" on as federal requirements for major source permitting since only a 1.0 to 1.0 offset ratio is required to meet federal NSR requirements. The 0.2 portion would be considered surplus for federal NSR accounting purposes which makes it available as a credit. Therefore it is not considered double counting.

Under PR 1315, SCAQMD is not using the same credit to meet federal equivalency requirements for two different sources. Instead, the 0.2 credit provided by certain sources is above and beyond (surplus to) federal requirements, and can be used to establish that the program as a whole is equivalent to federal requirements.

Comment #7:

(Page 6, Section II-B-2)

Proposed Rule 1315 would take the 0.2 portion of historic emission reductions and use it in the AQMD's internal account, rendering it temporary and contrary to the federal NSR requirements for credits to be permanent.

Response

As earlier stated, PR 1315 is only an accounting mechanism that accounts for offsets that are surplus to federal requirements and so, by itself, does not cause any use of these offsets. Moreover, federal requirements that credits be permanent, means that emissions source creating the credits be permanently shut down as opposed to temporarily shut down. As a result, the original credits that were applied at a 1.2 to 1 offset ratio were all permanent and in compliance with federal NSR requirements. PR 1315 does not change that status.

Comment #8:

(Page 7, Section II-B-3)

Proposed Rule 1315 contains provisions which would alter the credits available for purchase and would have real consequences to the physical environment. Therefore it should not be exempt from CEQA.

Response

PR 1315 is an accounting mechanism and will not alter the quantity of emission reductions available from the Priority Reserve. Rule 1309.1 limits the quantity of offsets to be deposited into the Priority Reserve each quarter and, therefore, the quantity available that may be used, if any. However, as requested by EPA, PR 1315 enables or directs the Executive Officer to discontinue funding the Priority Reserve if insufficient credits exist in AQMD federal offsets accounts or if a shortfall is projected to exist. Currently there is no mechanism to discontinue funding the Priority Reserve due to an actual or projected shortage of credits in AQMD's offset accounts. As a result, PR 1315 has the potential to benefit the environment by triggering the discontinuation of funding of the Priority Reserve, but not of negatively impacting the environment. Therefore, PR 1315 does not have the potential for adverse significant impacts. (Also please refer to response to Comment #1.)

Comment #9:

(Page 7, Section II-B-4)

Proposed Rule 1315 is a violation of AB 1054's (H & S §39616) anti-backsliding provisions because is allows more credits into the offset account under less stringent criteria, and state law prohibits the AQMD from making its NSR rules less stringent than they were on December 30, 2002. (H. & S. 42504.)

Response

As indicated earlier, PR 1315 merely formalizes the AQMD's federal NSR offset accounting methodology. Moreover, the proposed methodology would reduce the AQMD's overall offset accounts by 42%. This is calculated by summing the previously-reported 2002 total offset account balances and comparing it to the Revised 2002 total running balances as illustrated in Table 5. Therefore, PR 1315 does not violate any backsliding provision. Also, CARB, which is charged with enforcing these anti-backsliding provisions, has not raised objection with the proposed rule.

The commenter cites AB 1054 (H & S § 39616), which authorizes districts to adopt "market-based incentive programs" meeting certain requirements. Section 39616, adopted in 1992, is not applicable to District NSR rules, because districts have implemented – and indeed have been required to implement – such rules since the 1970s, whereas the authorization for "market-based incentive programs" was only effective in 1992. Instead AB 1054 applies to market-based programs such as RECLAIM, which allows sources to choose to either reduce emissions or obtain credits from another source that has reduced emissions beyond applicable requirements. Also, section 39616 (g) provides that AB 1054 does not apply to district emission trades imposed by permit or rule that

are not part of a market-based incentive program, so clearly not all use of credits is subject to AB 1054.

The commenter also cites SB 288 and H & S §42504(a), which provides that a district may not "amend or revise its new source review rules or regulations to be less stringent than those that existed on December 30, 2002." PR 1315 cannot violate this provision since as of December 30, 2002, the District did not have any NSR rule governing accounting for federal equivalency, so PR 1315 cannot be less stringent than 2002 rules. Moreover, the District believes that SB 288 does not apply to offset requirements in any event. Finally, as noted above, PR 1315 actually makes the existing program more stringent by limiting access to credits where the District projects that insufficient credits will be available.

# Comment #10:

# (Page 8, Section II-B-4)

Proposed Rule 1315 would make current accounting practices less stringent and roll them back compared to federal NSR standards by including certain credits which were not previously available for purchase. This change will increase available NOx credits by 39%, which is an example of backsliding from existing rules.

# Response

The proposed rule memorializes the currently available accounting practices. Some aspects (i.e. minor sources shutdowns, etc.) of the proposed accounting methodology were always available the entire subject period, but due to the ample amounts available and resource constraints, weren't quantified in the past accounting. In addition, while the amount of NOx has increased, the rest of the criteria pollutants have decreased by much greater percentages. For all pollutants, the revised 2002 balances have been reduced by an overall 42%. Individual reductions – excluding NOx - have ranged from a maximum of 81% for PM10 to 36% for VOC. Moreover, as indicated earlier, these sources of credits have always been available, but AQMD had not previously quantified them for purpose of accounting. Additionally, sources of NOx emissions are combustion sources, which also emit CO, PM10, and VOCs, which again are being sharply decreased. Thus, a new or modified source relying on the Priority Reserve would be limited in its ability to increase NOx emissions, because of the more limited amounts of CO, PM10, and *VOCs.* Therefore, there is no backsliding from current rules.

# Comment #11:

# (Page 8, Section II-B-4)

The amount of past credits that AQMD claims will be reduced are invalid due to lack of documentation which also is a violation of state and federal law.

Response

AQMD has decided to remove the past credits from its federal offset accounts because it <u>presently</u> does not retain any documentation related to the generation of such credits. This was a voluntary change made by AQMD in order to reach agreements with EPA on the overall tracking system. The credits were not removed because they were considered invalid, and up until this time had resided in AQMD's federal offset account as an available source of credits. Also AQMD is not requesting any State Implementation Plan (SIP) emission reductions for such action. Therefore, there is no violation of state or federal law.

EPA has previously approved the use of these credits in its 1996 approval of the District's NSR rules. Therefore, EPA did not believe these credits were invalid under federal law.

Comment #12:

(Page 8, Section II-B-4)

Proposed Rule 1315 will take credit for 20% extra reductions, thus what used to be 20% reduction from major sources will become a purchasable credit, producing an offset ratio of 1:1, which constitutes backsliding and a violation of state law.

Response

The use of 20% extra reductions as credits due to the offset ratios is in recognition that federal law only requires a 1 to 1 ratio for SOx, CO, and PM10. Although AQMD's NSR rule requires a 1.2 to 1 ratio, the additional 20% reductions has always been a surplus to federal NSR requirements. The AQMD had previously not quantified such surplus credits and PR 1315 merely formalizes the procedures that AQMD uses to quantify such surplus credits. AQMD's NSR rule still requires a 1.2 to 1 offset ratio for all pollutants. Therefore, there is no increase in emissions or violations of the state law. CARB has also not found any violations of state law in PR 1315. (Also please see response to comment #6 and to comment #9, relating to backsliding.)

Comment #13:

(Page 8, Section II-B-5)

Proposed Rule 1315 retroactively reassigns ERCs from orphan shutdowns without agreement from their original owners and wrongfully assumes the right to deposit these newly created credits into offset accounts without retiring them.

Response

As indicated earlier, PR 1315 merely memorializes the AQMD's federal NSR offset tracking procedures. The purpose of such accounting is to demonstrate whether or not in the aggregate there were sufficient credits surplus to federal NSR requirements to offset increases from major sources which are exempt from providing offsets in the form of ERCs under AQMD's NSR program. If emission reductions associated with shut down of equipment are to be used to offset emission increases from

sources that are not exempt from AQMD's NSR offset requirements, the equipment operator must apply and obtain ERCs. If a source does not apply for ERCs, then such emission reductions are considered surplus to federal requirements. AQMD uses the NSR tracking procedures to quantify and track such reductions, as well as increases from major sources which are exempt from offset requirements under AQMD's NSR program, in order to show that the overall emission reductions are equal to or greater than the emission increases from such sources. If a source wishes to retire their reductions, it can apply for an ERC and subsequently retire the ERC. If they fail to do so, they have abandoned their credits, giving up any right to control what will be done with them. Finally, as indicated before, the minor source orphan shutdowns have always been surplus but not previously quantified. PR 1315 does not increase or decrease such credits, but rather formalizes the procedure used for tracking and accounting for such reductions and increases.

Comment #14:

(Page 12, Section II-C-4) AQMD piecemeals the CEQA analysis by not addressing the environmental impacts of PAR 1309.1, 1302 and 1315 together.

Response

As discussed in Response to Comment 1, PR 1315 will not result in any adverse environmental impacts, and does not even qualify as a "project" under CEQA. Therefore, considering PR 1315 separately from PAR 1309.1 does not violate the requirement that a "project" include "the whole of an action" (CEQA Guidelines §15378) and does not constitute piecemealing.

# **Comments by Coalition for a Safe Environment**

Comment #1: (Page 1, Item #1) The amendments provide no environmental

benefits and therefore violate CEQA.

Response: Throughout this letter, the commenter fails to identify what rule

amendment is being referred to. For purposes of responding where it is unclear, AQMD will assume the commenter refers to PR 1315. CEQA does not require environmental benefit, so Comment 1 does not establish a

violation.

Comment #2: (Page 1, Item #2) The amendments will increase cumulative impacts

by allowing new polluting facilities to be established, and will allow

new sources and types of pollution, in violation of CEQA.

Response: See response #1 to NRDC comment letter. PR 1315 does not cause any

adverse environmental impact.

Comment #3: (Page 2, Item #3) The amendments will cause asthma in children,

respiratory health problems, cardiovascular disease and premature

death, in violation of CEQA.

Response: See response #1 to NRDC comment letter. PR 1315 does not cause any

adverse environmental impact.

Comment 4: (Page 2, Item #4) The amendments allow the expansion of an illegal

pollution trading program and will allow an increase in pollution.

Response: See response #1 to NRDC comment letter. Offset programs for major NSR

sources are not illegal but in fact required by federal law.

Comment #5: (Page 2, Item #5) The amendments illegally subsidize polluters by

allowing them to purchase credits at a cheap price. AQMD gives polluters a license to kill and creates a permanent public health crisis.

Response: This comment refers to PAR 1309.1, not to PR 1315. However, the credit

prices contained in PR 1309.1 are intended to be representative of recent market prices. Moreover, whenever AQMD issues a permit, it assures that there will not be a significant increase in criteria pollutant concentrations, through Regulation XIII, and assures that toxic pollutants will not create risks beyond what the District Board has deemed acceptable in Rule 1401

(e.g., 10 in a million cancer risk and using Best Available Control

Technology to reduce toxics). AQMD is doing everything it its power to reduce public health risks resulting from air pollution, including the most stringent control program in the nation.

Comment #6:

(Page 2, Item #6) There were no meetings in Environmental Justice Communities where new toxic polluting facilities are being proposed. AQMD refused to extend the public comment period. There is no need to adopt in September.

Response:

This comment pertains to PAR 1309.1. However, AQMD's permit process will assure that any new sources do not exceed legal limits on toxic pollution.

Comment #7:

(Page 3, Item #7) AQMD failed to <u>advertisein advertise in</u> newspaper, radio, or television, attend any community meeting, or distribute public information to the Environmental Justice Communities that will be impacted by these amendments.

Response:

The public notices for the public consultation meeting regarding PR 1315 and the two workshops regarding Proposed Amended Rules (PARs) 1302 and 1309.1 described the proposed project and announced the date, time and location of the meetings and the notices were posted in local newspapers in each of the four counties. An Initial Study and a Draft EA were prepared for PARs 1302 and 1309.1 and both the Notice of Preparation (NOP) and Notice of Completion (NOC) were published in the Los Angeles Times which is the most widely distributed regional newspaper in southern California. The NOP and NOC also provided a brief description of the proposed project and where the CEQA document could be obtained or accessed. These notices were also sent via e-mail to interested parties, local cities, counties, school and fire department contacts. Interested parties include citizen groups such as environmental organizations. Specifically, Julie Masters and Tim Grabiel from the Natural Resources Defense Council; Joseph K. Lyou Ph D from California Environmental Rights Alliance; Scott Kuhn, Bahrem Fazeli and Agustin Eichwald from Communities for a Better Environment; Mary Ann Webster from the Sierra Club; Robina Suwol from California Safe Schools; Cynthia Babich from Del Amo Action Committee; Jan Musquit from Center for Community Action & Environmental Justice and Jesse Marquez from the Coalition for a Safe Environment receive all notifications regarding all our CEQA actions. Further, notices have been sent to contacts in EJ communities such as Mariano Aguirre at the City of Huntington Park, Julia Gonzalez at the City of Maywood, and Gretchen Hardison and Wayne King at the City of Los Angeles (whose jurisdiction includes the Wilmington area). Finally, proposed rules, staff reports and

CEQA documents have been available online and at the SCAQMD's Public Information Center.

Comment #8: (Page 3, Item #8) AQMD is misleading the public by giving the

impression that new projects will be approved, when they may not

be. CEQA requires description of these projects.

Response: This comment pertains to PAR 1309.1. However, AQMD has not implied

that any project will necessarily be approved. AQMD will postpone the portions of PAR 1309.1 which are not statutorily exempt from CEQA to

give fuller CEQA consideration to non-exempt projects.

Comment #9: (Page 3, Item #9) AQMD should have consulted with its

Environmental Justice Advisory Committee.

Response: PR 1315 does not have any adverse impact on the environment, as

explained in Response to comment No. 1 to the group of environmental

organizations' comment letter.

Comment #10: (Page 3, Item #10) The amendments violate AQMD, state, and

federal Environmental Justice Policies.

Response: PR 1315 does not have any adverse impact and does not violate any

environmental justice policies.

Comment #11: (Page 3, Item #11) PR 1309.1 lists certain specific projects that have

not submitted permit applications. Why is there no description of

these projects in the environmental assessment?

Response: This comment pertains to PAR 1309.1.

Comment #12: (Page 4, Item #12) CEQA requires "alternatives to activity." AQMD

should have included alternatives to the projects listed in Table 1 or

the EA.

Response: This comment pertains to PAR 1309.1. However, the "activity" being

approved is PAR 1309.1, not the individual projects that may in the future use credits under PAR 1309.1. These projects will be subject to full CEOA analysis, including alternatives if there are any significant adverse

impacts of such projects. AQMD will consider alternatives to the

"activity," i.e., PAR 1309.1 in its CEQA analysis of that rule.

Comment #13: (Page 4, Item #13) AQMD has not provided an assessment of

reasonably foreseeable impacts or appropriate mitigation measures

for any of the projects listed in Table 1 or the EA.

Response: This comment pertains to PAR 1309.1

Comment #14: (Page 4, Item #14)

Proposed Rule 1315 accounting changes violate the Federal NSR rules which require that reductions be surplus and permanent. AQMD is in

violation of the Clean Air Act and federal NSR.

Response: As indicated earlier, PR 1315 is merely formalizing the accounting

mechanism for federal NSR offset tracking. In addition, as indicated in

responses to comments #4 and #7 to the group of environmental

organizations' comment letter, the credits tracked by PR 1315 are both surplus and permanent. Therefore, there are no violations of the Clean

Air Act or federal NSR.